ROCHESTER COMMUNITY AND TECHNICAL COLLEGE COMMON COURSE OUTLINE

Course discipline/number/title: AMT 2740: Drive Train Theory

A. CATALOG DESCRIPTION
1. Credits: 3
2. Hours/Week: 3
3. Prerequisites (Course discipline/number): None
4. Other requirements: None
5. MnTC Goals (if any): NA

B. COURSE DESCRIPTION: This course 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 systems.

C. DATE LAST REVISED (Month, year): February, 2022

D. OUTLINE OF MAJOR CONTENT AREAS:
1. Automatic Trans/Transaxle
2. Differentials
3. Clutches
4. Electronic Controls
5. Manual Transmissions
6. Scan tool applications
7. Gear Ratios

E. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Inspect, diagnose, and replace transmissions.
2. Identify types of transmissions.
3. Describe types of repairs needed.
4. Describe electronic control methods.

F. LEARNING OUTCOMES (MNTC): NA

G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:
1. Quizzes
2. Tests
3. Assignments
4. Worksheets

H. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcome(s):
Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.

Personal and Professional Accountability. Students will take responsibility as active learners for achieving their educational and personal goals.

I. SPECIAL INFORMATION (if any): None