ROCHESTER COMMUNITY AND TECHNICAL COLLEGE

COMMON COURSE OUTLINE

Course discipline/number/title: AMT 1815: Engine Repair Lab

A. CATALOG DESCRIPTION

1. **Credits: 7**
2. **Hours/Week: 14**
3. **Prerequisites (Course discipline/number):** None
4. **Other requirements:** None
5. **MnTC Goals (if any):** NA

B. COURSE DESCRIPTION: This course covers the diagnosis, repair procedure and testing and maintenance procedures for automotive engines.

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

D. OUTLINE OF MAJOR CONTENT AREAS:

1. Scan Tool Usage for Diagnosis and Evaluation of Engines
2. Compression Testing for Evaluating the Health of Engine
3. Leak Diagnosis of Various Types
4. Gaskets and Seals
5. Timing Belts and Chains
6. Cylinder Head and Lower Rotating Assembly Diagnosis
7. Cooling Systems

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

1. Evaluate engine condition.
2. Replace timing chains and belts.
3. carry out proper diagnostic sequence.
4. Perform proper replacement of all engine gaskets and seals.
5. Install new timing belt and chain kits.
6. Diagnose and replace faulty cooling system components.

F. LEARNING OUTCOMES (MNTC): NA

G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:

1. Lab projects
2. Lab assignments/worksheets
3. Individual and group projects

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.

I. SPECIAL INFORMATION (if any): None