ROCHESTER COMMUNITY AND TECHNICAL COLLEGE COMMON COURSE OUTLINE

Course discipline/number/title: FST 1560: Basic Pneumatics/Hydraulics

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

B. COURSE DESCRIPTION: This course prepares students in the field of fluid power. It consists of hydraulic principles including system components, diagrams, drawings, trouble shooting, and system maintenance. The basic relationships of force, work, energy and the different types of compressors will also be addressed.

C. DATE LAST REVISED (Month, year): December, 2021

D. OUTLINE OF MAJOR CONTENT AREAS:
1. Principals of pneumatics/hydraulics
2. Basic system parts identification
3. System drawings
4. System requirements and maintenance
5. System trouble shooting

E. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Identify and name the major components of pneumatic/hydraulic systems.
2. Describe basic system symbols and drawings.
3. Describe system parts and properties.
4. Identify and describe pump classifications.
5. Describe trouble shooting and maintenance issues and procedures.

F. LEARNING OUTCOMES (MNTC): NA

G. METHODS FOR EVALUATION OF STUDENT LEARNING. Methods may include but are not limited to:
1. Chapter worksheets/Lab log progress sheets
2. Evaluations
3. Exams

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