A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: *.*
Lab Hours/Week: 6
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

This course provides time for learners to conduct experiments and gain hands-on experience in the subject areas of hydraulic components and component circuits. This is a continuation of the Fluid Power Fundamentals Lab.

B. COURSE EFFECTIVE DATES: 12/18/1997 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Identify common fluid conductors, connectors, and fluids.
2. Demonstrate an understanding of pressure and flow versus pressure drop on the test stand.
3. Evaluate simple circuits for an understanding of pressure controls.
4. Evaluate simple circuits for an understanding of flow controls.
5. Evaluate simple circuits for an understanding of industrial directional controls.
6. Evaluate simple circuits for an understanding of mobile directional controls.
7. Evaluate various pumps.
8. Document test data and provide written test reports throughout the semester showing an understanding of the evaluation of the above data.
9. Set-up and demonstrate progressively difficult circuits.

D. LEARNING OUTCOMES (General)

1. The learner will demonstrate an understanding of pressure and flow control valves.
2. The learner will demonstrate an understanding of directional control valves.
3. The learner will demonstrate an understanding of pumps and actuators.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted