MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE
COURSE OUTLINE

Faculty are required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Collegewide Curriculum Committee.

DEPT. Fluid Power Technology COURSE NO. FLPW2175

NUMBER OF CREDITS: (1 C/ 1 lect/pres, 0 lab, 0 other)

COURSE TITLE  Pneumatic Certification Review

CATALOG DESCRIPTION Students review all parts of Fluid Power to help them prepare for the PNEUMATIC SPECIALIST certification test. (Prerequisites: Enrolled in Fluid power or a past graduate of Fluid Power or working in the field of Fluid Power).

AUDIENCE

FULFILLS MN TRANSFER CURRICULUM AREA(S) *(Leave blank if not applicable)*

PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE:

LENGTH OF COURSE 1 credit

THIS COURSE IS USUALLY OFFERED:
Every other year [ ] fall [ ] spring x [ ] summer [ ] undetermined [ ]

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT:
2) THINKING SKILLS:
3) COMMUNICATIONS SKILLS:
4) HUMAN DIVERSITY:

TOPICS TO BE COVERED:
1. review basic pneumatic fundamentals
2. review speed control circuits
3. review dual supply circuits
4. calculate CV factors
5. review cylinder sizing
6. review pneumatic motor sizing
7. review various pneumatic circuits
8. review compressor sizing
9. review basic electrical circuits
10. review electronic circuits
11. review basic electrical calculations
12. review servo/proportional systems
13. review mechanical linkages
14. review mechanical calculations
15. calculate incline forces
16. review metric conversions

LIST OF EXPECTED COURSE OUTCOMES:
Learn the basics of hydraulic components and principles.

LEARNING/TEACHING TECHNIQUES used in the course are:
- Collaborative Learning
- Student Presentations
- Creative Projects
- Lecture
- Demonstrations
- Lab

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:
- Reading
- Oral Presentations
- Textbook Problems
- Group Problems
- Other (describe below)

EXPECTED STUDENT LEARNING OUTCOMES:
The information in this course outline is subject to revision.

Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or Minnesota Relay Service at 800-627-3529 or by using your preferred relay service.

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