DEPT. Fluid Power  COURSE NO. FLPW 1115

NUMBER OF CREDITS: 2

COURSE TITLE: AutoCad

CATALOG DESCRIPTION: Provides students with the knowledge and understanding of the skills necessary to design and produce mechanical blueprints, hydraulic circuit drawings, and graphs using drafting equipment and AutoCAD software.

AUDIENCE

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

PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE:

LENGTH OF COURSE 2 Credit (2 lect/pres, 0 lab, 0 other)

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

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

1) ACADEMIC CONTENT: The student will receive the knowledge and skills to understand basic blueprints and fluid power symbols and to be able to design circuits using AutoCAD software.

2) THINKING SKILLS: The student will be able to understand drawings and be able to create circuits.

3) COMMUNICATIONS SKILLS: The student will begin to demonstrate appropriate communications both oral and written.

4) HUMAN DIVERSITY: The student will gain self awareness regarding their feelings towards people of different cultures, value systems and socioeconomic status.

TOPICS TO BE COVERED:

1. identify drafting policies/procedures/standards
2. define drafting terms
3. identify alphabet of lines
4. identify part features sizes/shapes
5. draw various lines/shapes
6. draw selected objects
7. create drawing layers
8. produce orthographic/isometric part drawings
9. identify scales/measurements on assigned drawings
10. construct dimensioned drawings
11. produce drawings in field of study

LIST OF EXPECTED COURSE OUTCOMES: The student will be able to draw 3 view drawings, be able to
draw fluid power symbols, and be able to design circuit diagrams using AutoCAD software.

LEARNING/TEACHING TECHNIQUES used in the course are:
X Collaborative Learning  X Problem Solving
☐ Student Presentations  ☐ Interactive Lectures
☐ Creative Projects  ☐ Individual Coaching
X Lecture  ☐ Films/Video/Slides
X Demonstrations  ☐ Other (describe below)
☐ Lab

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:
X Reading  X Tests  X Individual Projects
☐ Oral Presentations  X Worksheets  ☐ Collaborative Projects
X Textbook Problems  ☐ Papers  ☐ Portfolio
☐ Group Problems  ☐ Term Paper
☐ 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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