MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE
COURSE OUTLINE

DEPT. RNEW **COURSE NUMBER: 1125**

NUMBER OF CREDITS: 1 **Lecture: 1 Lab: 0 OJT: 0**

Course Title:
P & ID and PFD Reading

Catalog Description:
P & ID and PFD Reading covers the symbols and diagrams commonly used on Piping and Instrumentation Diagrams (P & ID) and Process Flow Diagrams (PFD). Focus will be on identifying the types of diagrams, identifying instrument symbols and line symbols used on P & ID's, understanding the types of information typically found on a legend, using a P & ID to locate the components of a system, and reading a PFD to trace the flow paths of a system.

Prerequisites or Necessary Entry Skills/Knowledge:
None

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

☐Goal 1: Communication: By meeting the following competencies:
☐Goal 2: Critical Thinking: By meeting the following competencies:
☐Goal 3: Natural Sciences: By meeting the following competencies:
☐Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
☐Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
☐Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
☐Goal 7: Human Diversity: By meeting the following competencies:
☐Goal 8: Global Perspective: By meeting the following competencies:
☐Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
☐Goal 10: People and the Environment: By meeting the following competencies:

Topics to be Covered
Technical diagrams used at a process facility
Instrument symbols
Line symbols
Process Flow Diagram (PFD)

Student Learning Outcomes
Identify instrument and major equipment symbols.

Describe the process flow of a Dry Mill ethanol plant.
Identify and distinguish between various diagrams including PFD and P & ID diagrams.
Describe in general terms the type of information found on the various diagrams.
Distinguish between process lines and instrument control lines used on a P & ID.
Identify control loops on a P & ID and describe their function.

Is this course part of a transfer pathway: Yes ☐ No ☒
***If yes, please list the competencies below**

Revised Date: 3/29/2022