

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. CMAE

COURSE NUMBER: 1526

NUMBER OF CREDITS: 2

Lecture: 2 Lab: 0 OJT 0

Course Title:

Maintenance Awareness

Catalog Description:

Maintenance Awareness introduces the concepts of Total Productive Maintenance and preventative maintenance. This course is designed to align with the National Skills assessment and certification system for Maintenance Awareness. The course curriculum is based upon federally-endorsed national standards for production workers.

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

Preventative maintenance and Total Productive Maintenance.

Predictive maintenance.

Fundamentals of lubrication, electrical systems, hydraulics, pneumatics, and power transmission systems.

System monitors.

Importance of production schedules.

Maintenance issues in different systems

Student Learning Outcomes

Explain concepts of preventative maintenance practices.

Apply predictive and preventative maintenance program skills for the following systems:

Electrical systems

Pneumatic systems

Hydraulic systems

Machine automation systems

Lubrication processes

Mechanical systems

Discuss Total Productive Maintenance.

Analyze potential maintenance issues with production equipment.

Explain documentation within a maintenance plan.

Is this course part of a transfer pathway: Yes No

***If yes, please list the competencies below**

Revised Date: 1/2022