

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

**DEPT. CMAE**

**COURSE NUMBER: 1518**

**NUMBER OF CREDITS: 2**

**Lecture: 2 Lab: 0 OJT 0**

<b>Course Title:</b>
Manufacturing Process and Production

<b>Catalog Description:</b>
Manufacturing Process and Production emphasizes lean manufacturing principles, basic supply chain management, communication skills, and customer service. 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

<b>Prerequisites or Necessary Entry Skills/Knowledge:</b>
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:

<b>Topics to be Covered</b>
Identify customer needs
Production processes
Equipment set up
Job assignments
Material requirements
Process compliance
Customer requirements

<b>Student Learning Outcomes</b>
Demonstrate an understanding of manufacturing and production processes.
Identify customer needs to ensure that processes are in compliance with customer requirements.
Interpret job assignments to meet production goals.
Analyze workflow of team members & work groups to meet production goals.
Utilize lean and high-performance manufacturing principles to improve the manufacturing process.
Communicate material and product requirements

<b>Is this course part of a transfer pathway: Yes</b> <input type="checkbox"/> <b>No</b> <input checked="" type="checkbox"/>
<small>*If yes, please list the competencies below</small>

Revised Date: 1/2022