

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. WELD

COURSE NUMBER: 1270

NUMBER OF CREDITS: 2

Lecture: 2 Lab: 0 OJT: 0

Course Title:

Testing Codes and Inspection

Catalog Description:

Testing Codes and Inspection describes the different types of destructive and non-destructive weldment testing. Emphasis will be placed on major national welding codes that govern the welding industry specifically the American Welding Society Structural Code D1.1 along with the American Welding Society Codes.

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

Differences between destructive and non-destructive testing

The common discontinuities and the non-destructive methods of locating them

Mechanical or destructive testing methods

Why welds are tested

How to evaluate welds for compliance with a given standard or code

Student Learning Outcomes
Differentiate between mechanical or destructive and non-destructive testing.
Identify common discontinuities and non-destructive methods of locating them.
Describe how three mechanical or destructive methods are performed.
Provide reasons why welds are tested.
Evaluate a weld for compliance with a given American Welding Society standard or code.
Demonstrate a technical understanding of the testing, codes and inspection process.

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

Revised Date: 3/29/2022