

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

**DEPT. ELEC**

**COURSE NUMBER: 1215**

**NUMBER OF CREDITS: 2**

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

<b>Course Title:</b>
National Electric Code II

<b>Catalog Description:</b>
National Electrical Code II(NEC) covers requirements for cabling, conduit, raceways, wireways, boxes gutters, switches and panelboards. Also included are the requirements for equipment such as cords, cables, fixtures and fixture wire, appliances, fixed space heating, motors and motor circuits, refrigeration equipment and transformers.

<b>Prerequisites or Necessary Entry Skills/Knowledge:</b>
ELEC 1205

**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>
National Fire Protection Association (NFPA) - National Electrical Code 70
Requirements of the the National Electrical Code (NEC)
Special occupancies, equipment and conditions of the National Electrical Code (NEC)

<b>Student Learning Outcomes</b>
Determine switchboard, switchgear, and/or panelboard requirements.
Determine general use equipment requirements.
Determine air conditioning equipment and heating requirements.
Determine motor circuits and controllers' requirements.

Determine transformer requirements.
Determine special occupancies requirements.
Determine special equipment requirements.
Determine special conditions requirements.
Determine communication system requirements.

**Is this course part of a transfer pathway: Yes ☐ No ☒**

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

Revised Date: 1/1/2022