

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. ELEC

COURSE NUMBER: 1200

NUMBER OF CREDITS: 5

Lecture: 2 Lab: 3 OJT 0

Course Title:
Residential Wiring I

Catalog Description:
Residential Wiring I describes electrical safety, general safety, the use and care of hand tools, the specialty tools, and equipment used for residential wiring. Apply National Electrical Codes related to residential wiring. Discuss wiring methods for residential wiring.

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
National Electrical Code for residential wiring
Box fill calculations
Service calculations

Student Learning Outcomes
Identify wiring symbols
Calculate box fill
Install GFCI protected outlets
Install exhaust fans

Calculate floor area
Apply National Electrical Code
Install NM cables
Describe grounding requirements
Describe switch operations
Install various light switches
Install recessed light fixtures
Make pigtail splices

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

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

Revised Date: 1/1/2022