MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE
COURSE OUTLINE

Faculty are required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Collegewide Curriculum Committee.

COURSE TITLE: Conduit Installation                   COURSE NUMBER: ELEC 1220

COURSE DESCRIPTION:
This course is an introduction to the raceway types used in all types of wiring. Students will learn to thread, bend, and calculate raceway size and the number of wires permitted in a conduit. This course is also an introduction to hand benders and hydraulic benders. Students will also learn to identify fittings and other material used in installing a raceway system.
4 Credits (1 lect/pres, 3 lab, 0 other)

COURSE GOALS:
The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. (*designates a CRUCIAL goal)

1. exhibit safe work practices
2. apply National Electrical Code (NEC)
3. use power tools
4. recognize different service types
5. identify commercial drawing symbols
6. calculate plan dimensions
7. apply conductor derating factors
8. select branch circuit conductors
9. layout conduit installation
10. complete EMT installation
11. select correct conduit size
12. select correct box size
13. specify raceway supports
14. splice conductors
15. calculate angle pull boxes
16. identify rigid fittings
17. identify EMT fittings
18. complete flexible conduit installation
19. identify flexible conduit fittings
20. calculate box fill
21. identify raceway supports
22. identify wire connectors
23. calculate straight pull boxes
24. identify conduit bodies/covers
25. install surface raceway
26. describe floor outlet installation
27. layout raceway system
28. complete raceway materials list
29. make EMT stub
30. make EMT offset
31. make three-bend EMT saddle
32. use fish tapes

ATTENDANCE:
Students will be required to attend a minimum of 95% to satisfactorily complete this course.

"This course will cover the characteristics of hazardous wastes and its safe handling, storage, and disposal."
The information in this course outline is subject to revision

Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or Minnesota Relay Service at 800-627-3529 or by using your preferred relay service.

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