

# Dakota County Technical College

## ELLW 1140: Distribution IIA

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 2

Lab Hours/Week: 2

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course covers the construction aspects in the building of single-phase lines and the use of plan profiles, specification drawings, material lists, and their application to the field. It includes the equipment that will be used for this construction. Hot line work with sticks will also be introduced at this time. The hanging of guys, the stringing of conductors, anchor installations, industry framing practices, and safety in all line building, equipment operations, and material handling will be observed and practiced.

Prerequisites: ELLW1110, ELLW1120, and concurrent enrollment in ELLW1141

**B. COURSE EFFECTIVE DATES:** 03/19/1998 - Present

**C. OUTLINE OF MAJOR CONTENT AREAS**

**D. LEARNING OUTCOMES (General)**

1. apply bonding clips
2. apply butt wrap ground
3. apply conductor soft deadend
4. apply correct radio procedures
5. apply correct wire instruments
6. apply full tension two piece compression sleeve
7. apply preform full tension conductor splice
8. apply kellum grip
9. apply long pole ground
10. apply one piece full tension compression sleeve
11. apply preform full tension conductor splice
12. apply preform full tension repair sleeve
13. apply preform three piece guy splice
14. apply sag charts
15. apply short pole ground
16. apply wire safety procedures
17. apply wire tensioning practices
18. bond guy wires
19. bond system neutral grounds
20. cant poles
21. construct single phase applications
22. construct single phase applications
23. distribute materials per spec
24. distribute poles for a single phase line
25. evaluate wye system and delta systems for personal and equipment protection grounding practices
26. frame with correct dimensions
27. frame with correct dimensions
28. identify conductor construction
29. identify never creep anchors
30. identify rock anchors
31. identify single phase construction
32. install by-pass jumpers
33. install by-pass jumpers
34. install conductor running grounds
35. install ground rods
36. install grounds on wire and equipment
37. install guys
38. install helix anchors
39. install line grounds
40. install line grounds
41. install line poles
42. install log anchors
43. install patent expanding anchors
44. install PISA anchors

45. install preform guy grips
46. install screw anchors
47. install strain insulators
48. install stringing sheaves
49. install three bolt clamps
50. list material from spec. sheets
51. load fuse holder tubes
52. locate digger/derrick equipment
53. offset poles
54. plumb poles
55. position different wire equipment
56. rake poles
57. sag conductors
58. secure guy wire tails
59. set poles
60. string conductors
61. tamp poles
62. tension guys
63. use compression squeeze-on's
64. use different stringing rope applications
65. use guy pulling eye
66. use parallel groove clamps
67. use wire pulling grips
68. use wire pulling hoist

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted