

**LNWK 1273**  
**Overhead Line Construction I**  
**Western Texas College**

I. Basic Course Information

- A. Course Description: This course covers the basic layout of overhead distribution systems, basic utility pole setting, removing, framing, and guying.
- B. Prerequisites: None

II. Student Learning Outcomes

- A. Identify the major components of a typical overhead distribution system; distinguish between primary and secondary distribution systems; identify common overhead distribution system layouts
- B. Describe or demonstrate how to dig a hole for a utility pole using a digger derrick, a portable power digger, and manual digging tools
- C. Describe or demonstrate proper pole setting procedures [digger derrick & manual pole setting] and describe how an old pole may be safely removed after a replacement pole has been installed.
- D. Describe three basic types of pole construction; describe framing specifications; demonstrate pole framing
- E. Describe commonly used types of guys and explain how guy wires can be attached to poles; describe or demonstrate procedures for installing anchors and guy wires

III. Major Course Requirements: The grade for this course will be determined as follows:

- A. Exams: 25%
- B. Quizzes/Daily Assignments: 25%
- C. Participation: 25%
- D. Attendance: 25%
- E. Grading scale:
  - A= (90-100%)
  - B= (80-89%)
  - C= (70-79%)
  - D= (60-69%)

IV. Information on Books and Other Course Materials

- A. The Program utilizes T & D Power Skills' Lineworker Apprentice Training Program.
- B. Lineman gear and all training materials are provided to students.

V. Other Policies, Procedures and important dates: Please refer to the WTC Course Catalog for the following:

- A. Campus Calendar
- B. Final exam schedule
- C. How to drop a class
- D. Withdrawal information
- E. Student Conduct/Academic Integrity
- F. Class Attendance
- G. Students with disabilities

VI. Course Sequence & Content

<b>Week</b>	<b>Topic</b>
Week 1	Introduction to course. Discuss class syllabus, learning objectives, and classroom expectations.  Distribution System Layout
Week 2	Poles, Pole Hardware, Conductors, Pole Top Equipment Quiz 1
Week 3	Delta and Wye Primary Systems Quiz 2
Week 4	KV Primary Systems Quiz 3
Week 5	Digging the Hole and Pole Setting Using a Derrick Quiz 4
Week 6	Manual Pole Setting and Removal Quiz 5
Week 7	Manual Pole Setting Using Pikes Quiz 6
Week 8	Manual Pole Replacement Using the "Cut and Kick" Method Exam 1
Week 9	Principles of Pole Construction

	Quiz 7
Week 10	Construction Types Quiz 8
Week 11-12	Framing a Pole Quiz 9
Week 13	Guys Quiz 10
Week 14	Grounding Quiz 11
Week 15	Course Review
Week 16	Final Exam

Disclaimer: Sequence & Content is subject to change at the instructor's discretion.