

LNWK 1371
Underground Distribution Systems
Western Texas College

I. Basic Course Information

- A. Course Description: Examination of the common types of underground distribution systems. Components commonly found in these systems are introduced, and typical procedures for installing and inspecting URD equipment are described. This course also covers some of the safety hazards found in URD work environments and how to minimize the effects of electrical, atmospheric, and structural hazards.
- B. Prerequisites: None

II. Student Learning Outcomes

- A. Describe the three types of URD systems and the general equipment associated with each type; describe methods and procedures for installing and checking URD equipment
- B. Describe personal safety equipment and procedures commonly used in underground and URD work areas
- C. Identify excavation conditions that require shoring and describe the requirements for safely shoring trenches
- D. Identify atmospheric hazards that may be found in vaults and enclosed spaces; describe or demonstrate how to use an atmospheric test device to determine if the atmosphere in a vault is safe to breathe; explain how to use ventilation equipment to supply fresh air to an enclosed area

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

Week	Topic
Week 1	Introduction to Course. Discuss class syllabus, learning objectives, and classroom expectations.
Week 2	Types of URD Systems Quiz 1
Week 3	URD System Components Quiz 2
Week 4	Cables and Terminations Quiz 3
Week 5	URD Equipment Installation Quiz 4
Week 6	URD System Maintenance Quiz 5

Week 7	Equipment Operation Quiz 6
Week 8	Exam 1
Week 9	Work Area Safety Quiz 7
Week 10	Tools and Test Equipment Quiz 8
Week 11-12	Shoring Quiz 9
Week 13-14	Atmospheric Testing Quiz 10
Week 15	Course Review
Week 16	Final Exam

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