

LNWK 1241
Distribution Operations
Western Texas College

I. Basic Course Information

- A. Course Description: A study of the theoretical and practical operation of electric utility distribution systems. Topics include customer service voltages, capacitors, and coordination of protection equipment.
- B. Prerequisites: None

II. Student Learning Outcomes

- A. Calculate customer voltage
- B. Calculate capacitance necessary to control voltage
- C. Coordinate protective equipment
- D. Describe equipment behavior under load
- E. Identify various types of distribution systems and networks

III. Online Testing Requirements

- A. The midterm and final exam must be proctored by an approved testing organization. (Ask your instructor for more details.)
- B. Students are not allowed to use their book or notes of any kind while taking their proctored tests and exams.

IV. 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%)

V. 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.

VI. 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

VII. Course Sequence & Content

Week	Topic
Week 1	Introduction to course. Discuss class syllabus, learning objectives, and classroom expectations.
Week 2	Introduction to Distribution Systems Quiz 1
Week 3	Transformers Quiz 2
Week 4	Voltage Regulators
Week 5	Voltage Capacitors Quiz 3
Week 6	Distribution Lines and Layouts Quiz 4
Week 7-8	Protective Device Quiz 5 & 6
Week 9	Exam 1
Week 10	Transmission Components, Voltage, and Power Grids Quiz 7
Week 10	Conductors Quiz 8
Week11	Insulators Quiz 9
Week 12	Structures Quiz 10
Week 13-14	Construction Quiz 11
Week 15	Course Review

Week 16	Final Exam
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Disclaimer: Sequence & Content is subject to change at the instructor's discretion.