

LNWK 2322
DISTRIBUTION LINE CONSTRUCTION

Western Texas College

- I. Basic Course Information
 - A. Study of electric distribution line construction. Includes reading staking sheets and framing specifications, tailboard discussions, pole framing and setting, installing conductors, transformers and other line equipment and OSHA and NESC regulations.
- II. Basic Program Requirements
 - A. Safety glasses
 - B. Work boots
 - C. Leather work gloves
 - D. Long sleeve shirt
 - E. Notebook and pen
 - F. Proof of personal health/accident insurance is required.
 - G. Possible background check
 - H. Random drug testing will be performed on all Electrical Lineman Technology students.
- III. Course Objectives
 - A. Upon completion of the class each student will be able to:
 - Select necessary materials and equipment from staking sheet;
 - Demonstrate pole framing and setting;
 - Hold tailboard and safety procedure discussions.
- IV. Student Learning Outcomes
 - A. List equipment and material needed from staking sheet information; describe safe work procedures and tailboard discussion; define framing specifications; and demonstrate pole framing. Demonstrate pole setting procedures, conductor and equipment installations; and all relevant safety rules and procedures.
- V. Outcome Assessment Methods
 - A. Lab projects, written examinations, scenarios, rubric and group discussions.
- VI. Grading
 - A. Standard grading system is as follows:
 - A 90-100 Superior Achievement
 - B 80-89 Excellent Achievement
 - C 70-79 Average Achievement
 - D 60-69 Passing Achievement
 - F Below 60 Failing
 - B. There will be several exams spaced throughout the semester. The exam questions may include any combination of the following:
 - True/False

- Multiple choice
- Fill in the blank
- Short answer

VII. Student Attendance

- A. Class roll will be taken since regular and punctual attendance is expected for all designated class meeting time
- B. The attendance policy established by the College and set out in the current catalog will be applied in determining student attendance. *This includes the reporting of three hours of unexcused absences to the Counseling Center by the instructor, and an administrative drop for repeated attendance policy violations.*
- C. Students are encouraged to coordinate anticipated absences with the instructor and/or to advise the Counseling Center of any anticipated longer-term absences from class
- D. Please keep in mind that this course contains a significant number of graded assignments
- E. Excessive absences will result in the failure to complete one or more of these activities and therefore result in the loss of credit as described above.
- F. PLEASE NOTE:
 - Every three unexcused absences will result in the loss (drop) of a letter grade, regardless of a student's course average.
 - Tardies will be treated the same, with five tardies being equivalent to a loss (drop) in a letter grade.

VIII. Conduct and Academic Dishonesty

- A. This course will be taught in a college classroom environment. Students will come to class prepared to participate in the learning process and that part of this preparation will include the demonstration of mature and purposeful behavior. Therefore, activities such as sleeping in class, interruptive talking with fellow students (including cell phones), rudeness to fellow students, overt tobacco use or other types of inappropriate behavior (including cheating and plagiarism) will not be tolerated, and may be dealt with by instructor-initiated student withdrawal from class. College policy prohibits the consumption of drinks and snacks in the classroom.

IX. Additional Requirements

- A. Complete all course work with at least a score of 85, and pass 50% of the scheduled tests.
- B. Complete each level with a passing evaluation.

X. Required Books (Please note that these books will be used in several different classes.)

- A. Book: Lineman & Cableman's Handbook – ISBN 978-0-07-146789-6
- B. Book: Distribution Transformer Handbook – Alexander Publishing
- C. Book: Basic Electrical Power Distribution – A. Pansini
- D. Book: Safe Work Practices – Alexander Publishing
- E. Book: Specifications and Drawings for 12.4/7.2 kv Line Construction – RUS Bulletin 1728F-804

XI. Course Schedule

Course Content	
<u>Topic:</u> Introduction to Electrical Distribution Line Construction Lab 1: Introduction to Outside Lab	
<u>Topic:</u> Reading and Comprehending Stake Sheets Lab 2: Outside lab	
<u>Topic:</u> Reading and Comprehending Framing Specifications Lab 3: Outside lab	
<u>Topic:</u> Tailboard Discussions Lab 4: Outside lab	
<u>Topic:</u> Pole Framing and Setting Lab 5: Outside lab	
<u>Topic:</u> Pole Framing and Setting (continued) Lab 6: Outside lab	
<u>Topic:</u> Mid-Course Review Intensive Lab 7: Outside lab Mid-Course Review Intensive	
<u>Topic:</u> Safety in Electrical Distribution Construction Lab 8: Outside lab	
<u>Topic:</u> Planning and Design Lab #10 Outside lab	
<u>Topic:</u> System Components & Trouble Shooting Lab #11 Outside lab	
<u>Topic:</u> Underground Electrical Distribution System Lab #12 Outside lab	
<u>Topic:</u> Underground Systems Planning Considerations and Compliance Lab #13 Outside lab	
<u>Topic:</u> Underground System Components and Equipment Lab #14 Outside lab	
<u>Topic:</u> Course Review Intensive Lab 15: Lab Review Intensive	

Disclaimer: Schedule and content is subject to change at the instructor's discretion.

Class/Lab Assignments	60%
Exams	20%

Final Exam	20%
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Last Modified: August 24, 2016