

ELPT 1221
INTRODUCTION TO ELECTRICAL SAFETY AND TOOLS

Western Texas College

- I. Course Description
 - A. Safety rules and regulations. Includes the selection, inspection, use and maintenance of common tools for linemen.
- 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:
 - Identify and describe tools utilized in electrical line work
 - Maintain integrity of tools utilized in electrical line work
 - Correctly, and safely, use tools in electrical line work
 - Understand all safety terminology involved in the use of power tools for electrical line work
 - Demonstrate promptness and reliability
 - Participate in all duties as a lineman
- IV. Student Learning Outcomes
 - A. Explain electrical hazards and how to avoid them in the workplace
 - B. Discuss safety issues concerning lockout/tagout procedures
 - C. Demonstrate safe work habits using common hand and power tools for linemen
- 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.)

TITLE	ISBN/AUTHOR
Lineman's + Cableman's Handbook	ISBN 978-0-07-146789-6
Basic Electric Power Distribution	Alexander Publishing

SPECIFICATIONS AND DRAWINGS FOR 12.47/7.2 KV LINE CONSTRUCTION	Alexander Publishing
TRANSFORMATION FOR LINEWORKERS	Alexander Publishing
Distribution Transformer Handbook	Alexander Publishing
Pocket Guide to Watthour Meters	Alexander Publishing

XI. Course Schedule

Course Content
<u>Topic:</u> Introduction to EDS safety Lab 1: Introduction to Outside Lab
<u>Topic:</u> Electrical Safety Issues (continued) Lab 2: Outside lab
<u>Topic:</u> Presentation and Description of EDS Tools Lab 3: Outside lab
<u>Topic:</u> Discussion of Tools' Uses and Maintenance Lab 4: Outside lab
<u>Topic:</u> Beginning Use of Tools (in class and lab) Lab 5: Outside lab
<u>Topic:</u> Tool Safety Lab 6: Outside lab
<u>Topic:</u> Mid-Course Review Intensive Lab 7: Outside lab Mid-Course Review Intensive
<u>Topic:</u> Troubleshooting with EDS Tools Lab 8: Outside lab
<u>Topic:</u> Care and Testing of Power Tools Lab #10 Outside lab
<u>Topic:</u> Light Industrial Power Tools Lab #11 Outside lab
<u>Topic:</u> Heavy Industrial Power Tools Lab #12 Outside lab
<u>Topic:</u> Tool Safety Review Lab #13 Outside lab
<u>Topic:</u> Electrical Safety Review Lab #14 Outside lab

Topic: Course Review Intensive
Lab 14: Lab Review Intensive

Last Modified: August 24, 2016