

Lineman Program at Odessa College



Course Descriptions and Course Flow

✓ Knowledge Phase Course Sequencing

LNWK 1001

Fundamentals of Safety and Assessment - Teaches fundamental safety rules and regulations to help prevent accidents. Develop a safety culture by creating a safety awareness, recognizing hazards, using safe work practices, good communication skills and respect for fellow workers.

✚ (8 Clock Hours—6 Lecture Hours and 2 Lab/Field Experience Hours; Time Period: Weeks 1-5 in the program)

EECT 1005

Basic Electricity (AC/DC) - Basic AC & DC theory, Ohm's Law as they pertain to the Electrical Grid.

✚ (16 Clock Hours—8 Lecture Hours and 8 Lab/Field Experience Hours; Time Period :Weeks 1-5 in the program)

LNWK 1001

Lineman Terminology - Learn vocabulary and terminology that is used in Line Work Industry.

✚ (8 Clock Hours—4 Lecture Hours and 4 Lab/Field Experience Hours; Time Period : Weeks 1-5 in the program)

LNWK 1001

Lineman Tools & Equipment Competencies - Teaches students the proper use and care for personal climbing tools. Also discuss rigging tools and applications used in de-energized and energized line work.

✚ (16 Clock Hours—4 Lecture Hours and 12 Lab/Field Experience Hours; Time Period: Weeks 1-5 in the program)

EECT 1005

Basic Electrical Systems - Begin with Electrical Generation and follow the path of electricity to the consumer. Learn and understand Overhead and Underground circuit needs. Learn the components as they pertain to the Grid. (Transformers, Breakers, Capacitors etc.)

- ✚ (16 Clock Hours—4 Lecture Hours and 12 Lab/Field Experience Hours; Time Period: Weeks 1-5 in the program)

LNWK 1001

Rigging Knowledge - Teaches students about tensions and tools related to lifting and hoisting in overhead and underground applications. Learn rope and sling ratings, knot tying and splicing techniques.

- ✚ (8 Clock Hours—2 Lecture Hours and 6 Lab/Field Experience Hours; Time Period: Weeks 1-5 in the program)

LNWK 1001

Work Area Protection (Safebox) - Teaches students the concepts of creating a " Safebox" to work safely in. Teaches how to utilize procedures and tailboard meetings to create Safeboxes. Understanding the two main methods of working on lines and equipment-energized vs. de-energized circuits. How to effectively install grounds to protect from induction, step potentials, lightning and etc.

- ✚ (8 Clock Hours—6 Lecture Hours and 2 Lab/Field Experience Hours; Time Period: Weeks 5-10 in the program)

LNWK 2322

OSHA & NESC Regulations - Students learn to recognize and apply rules where they occur in overhead clearances and energized line work applications.

- ✚ (12 Clock Hours—4 Lecture Hours and 8 Lab/Field Experience Hours; Time Period: Weeks 5-14 in the program)



✓ **Skill Phase Course Sequencing**

LNWK 2322

Hydraulic Equipment Competencies - truck setup and operation are covered. Hand signals and work protection area are covered for OSHA and NESC Regulations. Students will dig & set poles to prepare for climbing exercises.

- ✚ (12 Clock Hours—2 Lecture Hours and 10 Lab/Field Experience Hours; Time Period: Weeks 5-14 in the program)

LNWK 1011

Beginner Climbing Competencies - Students learn to use climbing gear to ascend, descend and circle the pole at low elevations. They work in two man teams learning to work as a Groundman when not climbing. Also demonstrate proper use of PPE and Fall Protection.

- ✚ (20 Clock Hours—3 Lecture Hours and 17 Lab/Field Experience Hours; Time Period: Weeks 5-10 in the program)

LNWK 1011

Groundman Competencies - Students will learn Linecrew support activities. They will show proficiency skills in knot tying, using a handline to hoist material and tools and communication skills in two man climbing teams.

- ✚ (20 Clock Hours—3 Lecture Hours and 17 Lab/Field Experience Hours; Time Period: Weeks 5-10 in the program)

LNWK 1011

Advanced Climbing Competencies/PPE & Fall Protection - Students continue using climbing gear to ascend, descend and circle the pole at higher elevations. They work in two man teams learning to work as a Groundman when not climbing. They will practice hoisting material and tools to climber by using a handline and good communication skills. Also demonstrate proper use of PPE and Fall Protection.

- ✚ (40 Clock Hours—6 Lecture hours and 34 Lab/Field Experience Hours; Time Period: Weeks 5-10 in the program)

LNWK 1011

Pole Top Rescue Competencies - Students will learn and demonstrate ability to perform a Pole Top Rescue with the use of a handline.

- ✚ (12 Clock Hours—1 Lecture Hour and 11 Lab/Field Experience Hours; Time Period: Weeks 10-14 in the program)

LNWK 2322

Advanced Rigging Competencies & Transmission Competency – (Advanced Rigging) Students will demonstrate climbing skills and working from a bucket while sagging, dead-ending, splicing and repairing conductors. They will demonstrate proficiency skills in hanging cross-arms, transformers, switches and framing according to framing specifications). **(Transmission Competencies)**- Students will learn to climb and maneuver on wood-pole transmission structure while framing a wood H-Frame structure using a framing specification sheet using handlines .

- ✚ (16 Clock Hours—2 Lecture Hours and 14 Lab/Field Experience Hours; Time Period: Weeks 10-14 in the program)

LNWK 2322

Lineman Rodeo - Students will demonstrate all knowledge and skills they have learned in the Lineman Program for area electrical utility and contractor companies. This will promote future training classes and also may help students acquire employment in the Lineman Industry.

- ✚ (8 Clock Hours—1 Lecture Hour and 7Lab/Field Experience Hours; Time Period: Weeks 10-14 of the program)

LNWK 2322

Resume Development - This training will help students to develop a good Resume, develop good interview skills and learn to network themselves for future employment prospects.

- ✚ (2 Clock Hours—1 Lecture Hour and 1 Hour of Practice; Time Period: Week 14)

LNWK 2322

Lineman Certificate - Completion of Knowledge Test and Proficiency Skills at the end of the course.

- ✚ (2 Clock Hours---2 Hours for Exam; Time Period: Week 14)
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