

SOUTHEAST COMMUNITY COLLEGE
ADVANCED TECHNOLOGIES AND SKILLED TRADES DIVISION
Utility Line Worker Program
Revision Date: November 2025

I. CATALOG DESCRIPTION

Course Number: UTIL 1030
Course Title: Line Construction I
Prerequisite(s): None

Catalog Description: Study and application of equipment, materials, and specifications used in the construction of electrical distribution systems. Emphasis is placed on proper and safe pole-climbing techniques, digger derrick set-up and operation, and single-phase overhead line construction. Students gain hands-on experience with pole setting, plumbing, tamping, and the use of basic tools of the trade, reinforcing the fundamentals learned in the classroom.

Credit Hours: 6.0
Class Hours: 45
Lab Hours: 135
Total Contact Hours: 180

II. COURSE OBJECTIVES: *Course will:*

- A. Introduce students to the materials, tools, and equipment used in electrical distribution system construction.
- B. Emphasize the safe and proper techniques of pole climbing, equipment setup, and overhead line construction.
- C. Provide students with opportunities to apply classroom knowledge in hands-on lab activities that simulate field conditions.
- D. Develop students' understanding of single-phase distribution systems and related construction specifications.
- E. Reinforce the importance of safety practices, teamwork, and professionalism in the line trade.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES

A. Student Learning Outcomes: *Student will be able to:*

- 1. Identify and describe the equipment, tools, and materials used in electrical line construction.
- 2. Demonstrate proper and safe pole-climbing techniques using appropriate climbing and safety gear.
- 3. Set up and operate a digger derrick safely and effectively for pole installation and removal.
- 4. Construct a single-phase overhead distribution line according to industry specifications.
- 5. Perform basic pole-setting, plumbing, tamping, and guying operations with attention to safety and accuracy.
- 6. Apply classroom instruction to field-based tasks while demonstrating teamwork and adherence to safety protocols.
- 7. Inspect and maintain climbing equipment and tools to ensure safe working conditions.

- B.** General Education Learning Outcomes
 - 1. GELO #3: Critical Thinking and Problem Solving
 - i. Outcome #1: Collect, identify, interpret, and analyze data.

IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)

- A.** TBD
 - 1.

V. INSTRUCTIONAL MATERIALS

TBD

- A.** Required Text(s):
- B.** Other Resources:
 - 1.

VI. METHODS OF PRESENTATION/INSTRUCTION

- A.** Methods of presentation typically include a combination of the following:
 - 1.

VII. METHODS OF EVALUATION

- A.** Methods of evaluation typically include a combination of the following:
 - 1. Participation
 - 2. Daily Assignments
 - 3. Written exams/quizzes
 - 4. Lab performance

C. SCC STANDARD GRADING SCALE POLICY:

A+	95-100	C+	75-79	F	59 or less
A	90-94	C	70-74		
B+	85-89	D+	65-69		
B	80-84	D	60-64		

VIII. SPECIFIC COURSE REQUIREMENTS