

Course Objectives/Course Outline
Spokane Community College

Course Title: Line Construction I

Prefix and Course Number: LINE 101

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Practice appropriate safety measures in the field
- Transport, erect and climb electrical poles
- Apply basic principles of electricity
- Operate a variety of equipment

Course Outline:

- I. Climbing Basics
 - A. WA State Code-WAC 45
 - B. Safety
 - C. Rules
 - D. Personal Protective Gear
- II. Knots
 - A. Square
 - B. Sheet Bend
 - C. 1/2"
 - D. Double 1/2"
 - E. Timber Hitch
- III. Poles
 - A. Test and Treat
 - B. Cross Arms
 - C. Headlines
 - D. Cutting Gains
- IV. PC Basics
 - A. Fundamentals of Electricity
 - B. Robes and Knots
 - C. Tools and Rigging
- V. Electricity Principles
 - A. Climbing Basics
 - B. Heavy Arms
 - C. Double Arms
 - D. Ohm's Law
 - E. Series/parallel Circuits
 - F. Combination Circuits
- VI. Materials Familiarization
 - A. CDL Principles (Drivers)
 - B. Knots
 - C. Bowline
 - D. Running Bowline
 - E. Sheep Shank
 - F. Dove Hitch
 - G. Trucker's Hitch

- VII. Overhead construction Boots

- A. Climbing
- B. Materials
- C. Tools and Equipment
- D. Working with Electricity

VIII. CPR and First Aid

- A. Card Certification

IX. Practical Applications

- A. Hoists
- B. Rips
- C. Wires
- D. Sleeves
- E. Dead-ending Wire
- F. Transfer Wire
- G. Tools and Equipment
- H. Digging Holes