## Print Date: 8/8/14 Course Objectives/Course Outline Spokane Community College

Course Title:

Line Construction III

Prefix and Course Number: LINE 103

**Course Learning Outcomes:** 

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

- Interpret job prints and standards
- Practice safe overhead and underground construction methods
- Utilize established radio communication practices

## **Course Outline:**

- I. Advanced Electrical Concepts
  - A. AC Theory
  - B. Vectoring
  - C. Capacitors
  - D. Inductors
  - E. Capacitive Reactants
  - F. Inductive Reactants
  - G. Trigonometry
  - H. 3-Phase AC Circuits
  - I. Meters
- II. Advanced Practical Applications
  - A. Traffic Control
  - B. Grounding
  - C. Bucket Truck Operations
  - D. Field Trips
  - E. Underground Constructions
- III. Advanced Communications
  - A. Mock Interviews
  - B. Resume Writing
- IV. Characteristics and Hazards of Natural Gas
  - A. Flammability Range
  - B. Mixture of Gas and Air
  - C. Molecular Makeup
  - D. Gas Migration
  - E. Potential Ignition Sources

- V. Flagger Certification
  - A. Traffic Control
  - B. Hand Signals
- VI. Practical Applications/Gas SafetyA. Backhoe OperationB. Installing Gas Lines

  - C. Excavation and Shoring
  - D. Soil Classification and Identification
  - E. Introduction to Firefighting Techniques