APR 111M : METERING BASICS

Transcript title

Metering Basics

Credits

4

Grading mode

Standard letter grades

Total contact hours

84

Other hours

84

Course Description

This course is an introduction to electrical trade theory for Meterman Apprentices and will review math concepts including percentages, scientific notation, metric prefixes, ratios, proportions, and equations. Apprentices will also be introduced to electrical topics such as current, voltage, resistance, Ohm's Law, power, DC series, and parallel circuits. Lastly students will learn about single phase metering, Blondel's Theorem, metering vocabulary, single phase transformers, and working safely within the electric field.

Course learning outcomes

1. Solve math problems involving percentages, scientific notation, meter prefixes, ratios, proportions, and simple equations.
2. Explain the fundamentals of electricity including current, voltage, resistance, and power.
3. Cite specific electrical hazards, how to avoid them, and what to do when they occur.
4. Use Ohm's Law and Kirchhoff's Laws to solve for unknown values in values in electrical DC series and parallel circuits.
5. Identify, install and know proper applications for all single phase, self-contained and network meters (1s, 2s, 12s).