

Course Objectives/Course Outline
Spokane Community College

Course Title: Circuit Theory I Lab

Prefix and Course Number: ELECT 112

Course Learning Outcomes:

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

- Operate electronic and mechanical devices using basic safety procedures
- Construct DC circuits and measure results
- Demonstrate basic soldering skills
- Use of DC meters and Power Sources to evaluate and troubleshoot basic DC circuits
- Create and simulate circuits in MultiSim
- Produce technical documents in Microsoft Word and Excel

Course Outline:

- I. Safety
- II. Basic Skills (Mechanical)
 - A. Tools
 - C. Breadboard
 - D. Soldering and De-soldering Techniques
- III. Basic Skills (Electronic)
 - A. DC Meters
 - B. DC Power Sources
- IV. Circuits
 - A. Series Circuits
 - B. Parallel Circuits
 - C. Series-Parallel Circuits
- V. Voltage and Current Dividers
- VI. Kirchhoff's Laws
- VII. Network Theorems
- VIII. Conductors and Insulators
- IX. Troubleshooting Techniques