Course Objectives/Course Outline Spokane Community College

Course Title: Circuit Theory II

Prefix and Course Number: ELECT 121

Course Learning Outcomes:

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

- Calculate AC circuit quantities
- Identify the response curves of filter circuits
- List the AC and DC characteristics of capacitance
- Calculate RC time constants
- Explain the principles of filter circuits
- Calculate the characteristics of RLC circuits
- Apply circuit understanding to evaluate measurements

Course Outline:

- I. Course Overview
- II. Equipment Protection
- III. Magnetism and Electromagnetism
- V. Alternating Voltage and Current
- VI. Capacitance
- VII. Capacitive Reactance
- VIII. Capacitive Circuits
- IX. Inductance
- X. Inductive Reactance
- XI. Inductive Circuits
- XII. RC and L/R Time Constants
- XIII. Alternating Current Circuits
- XIV. Resonance

XV. Filters