Print Date: 8/18/14

Course Objectives/Course Outline
Spokane Community College

Course Title: Advanced Machine Controls
Prefix and Course Number: FLPT 243

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

- understand and apply terminology used with programmable controllers
- convert relay logic schematics to PLC program
- write a program from verbal machine sequence of operation
- program an Allen-Bradley Mini PLC-2 programmable controller

Course Outline:

I. Allen-Bradley Mini PLC-2 Programmable Controller
  A. Identifiable Parts
    1. program panel
    2. processor
  B. Basic Concepts
    1. user friendly
    2. ladder diagram programming
    3. inputs
    4. outputs
    5. memory units
  C. Read/Write Memory
    1. scan operation
  D. Programmed Logic
    1. relay equivalent instructions
    2. timer counter instructions
    3. data manipulation instructions
    4. arithmetic instructions
  E. Writing P.C. Program from Relay Logic Schematic
    1. basic rules
  F. Redraw Relay Logic Schematics
    1. PLC program symbols
  G. Program PLC-2 Using:
    1. program panel keyboard
    2. hand-drawn PLC program
    3. accuracy of program visual on CRT