

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

ACADEMIC AFFAIRS

Course Number: ELEC 431 Department: Electrical Engineering Tech.

Course Title: Control System Theory II Semester: Spring Year: 1999

Objectives/Competencies

Course Objective	Competencies
1.Understand the basic op-amp.	1.Through the use of exams, exercises and lab assignments, the student will become proficient in all aspects of a control system and its components.
2.Understand basic op-amp circuits.	1.Lectures, demonstrations, and associated labs will prepare the student to solve problems and utilize test equipment to troubleshoot and repair systems and circuits.
3.Understand interfacing, switches, relays, and power devices.	1.Exams, exercises and lab assignments will be used to solve problems through the student's physical and mental capabilities assisted by the instructor's guidance.
4.Understand all major types of sensors; i.e., temperature, pressure and position.	1.Problem solving will be done by mathematical and functional thinking.
5.Understand actuators such as linear, hydraulic, and pneumatic actuators.	1.Through the use of lab experiments and equipment, the student will be able to show the instructor his/her ability

Course Objective	Competencies
<p>6.Understand basic DC motors, basic AC motors and stepper motors.</p> <p>7.Understand control strategies from simple two-point on-off systems to proportional control to PID systems.</p> <p>8.Discussion of fuzzy logic controllers.</p>	<p>to understand and repair problems.</p>