

# El Paso Community College

## Syllabus

### Part II

## Official Course Description

<b>SUBJECT AREA</b>	<u>Electrical Technology</u>								
<b>COURSE RUBRIC AND NUMBER</b>	<u>ELTN 1343</u>								
<b>COURSE TITLE</b>	<u>Electrical Troubleshooting</u>								
<b>COURSE CREDIT HOURS</b>	<table style="margin: auto; border-collapse: collapse;"> <tr> <td style="text-align: center; border-bottom: 1px solid black;">3</td> <td style="text-align: center; border-bottom: 1px solid black;">2</td> <td style="text-align: center; border-bottom: 1px solid black;">:</td> <td style="text-align: center; border-bottom: 1px solid black;">2</td> </tr> <tr> <td style="text-align: center;">Credits</td> <td style="text-align: center;">Lec</td> <td></td> <td style="text-align: center;">Lab</td> </tr> </table>	3	2	:	2	Credits	Lec		Lab
3	2	:	2						
Credits	Lec		Lab						

### I. Catalog Description

Introduces the maintenance, theory of operation, troubleshooting, and repair of circuits of various residential, commercial, and industrial electrical systems. **Highly recommended completing ELPT 1341 before registering for ELTN 1343. (2:2). Lab fee.**

### II. Course Objectives

Upon satisfactory completion of this course, the student will be able to:

- A. Safely identify and troubleshoot various electrical systems and equipment.
- B. Identify short circuits, open circuits, and grounded circuits.
- C. Determine proper electromechanical sequence of work.
- D. Identify and troubleshoot electrical control/system.
- E. Review existing preventive maintenance plan.
- F. Interview user/operator about prior conditions.
- G. Develop troubleshooting skills for new technologies.
- H. Identify NEC requirements.
- I. Distinguish among and utilize electrical test equipment.

### III. THECB Learning Outcomes (WECM)

1. Use multimeters to perform tests on electrical equipment.
2. Discuss various types of circuits and electrical systems.
3. Demonstrate the proper way to test transformers and motors.
4. Identify a short circuit, open circuit, and a closed circuit; and troubleshoot electric motors and control circuits.

### IV. Evaluation

The students must demonstrate the knowledge and skills stated in the objective in order to complete the course. Letter grades will be arranged as follows:

90-100	A	70-79	C	0-59	F
80-89	B	60-69	D		

Students should be able to compute their grade average anytime during the course. Missed assignments and make-up tests will be given at the discretion of the instructor.

**V. Disability Statement (Americans with Disabilities Act [ADA])**

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

**VI. 6 Drop Rule**

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.