

# 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>ELPT 1325</u>
<b>COURSE TITLE</b>	<u>National Electrical Code I</u>
<b>COURSE CREDIT HOURS</b>	<u>3                      2                      :</u> <u>2</u>
	Credits                      Lec                      Lab

**I. Catalog Description**

Introduces the study of the National Electric Code (NEC) for those employed in fields requiring knowledge of the Code. Emphasizes wiring design, protection, methods, and materials; equipment for general use; and basic calculations. (2:2).

**II. Course Objectives**

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

- A. Navigate the National Electrical Code (NEC).
- B. Apply the definitions and trade terminology used in the NEC.
- C. Calculate the size of boxes and raceways.
- D. Calculate overcurrent protection, conductors and equipment grounding conductors.
- E. Calculate conductors, overcurrent protection, and service equipment as applied to building services.
- F. Calculate dwelling services using demand factors.
- G. Apply grounding and bonding principles pertaining to services (e.g. grounding electrode system).
- H. Identify the grounding electrodes.
- I. Identify various wiring methods and materials (Article 300).
- J. Recognize the different types of equipment for general use of flexible cords and cables (Article 400).

**III. THECB Learning Outcomes (WECM)**

- 1. Locate and interpret the sections in the NEC that pertain to electrical installations.
- 2. Calculate the size of conductors, boxes, raceways, and overcurrent protective devices for branch circuits supplying electrical equipment.
- 3. Calculate conductors, overcurrent protection, and service equipment as applied to building services.
- 4. Compute the size of branch circuits, feeders, and equipment for motors.

**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
- 80-89 B
- 70-79 C
- 60-69 D
- 0-59 F

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.

**VII. Title IX and Sex Discrimination**

Title 9 (20 U.S.C. 1681 & 34 C.F.R. Part 106) states the following "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance." The Violence Against Women Act (VAWA) prohibits stalking, date violence, sexual violence, and domestic violence for all students, employees and visitors (male and female). If you have any concerns related to discrimination, harassment, or assault (of any type) you can contact the Assistant to the Vice President for Student and Enrollment Services at 915-831-2655. Employees can call the Manager of Employee Relations at 915-831-6458. Reports of sexual assault/violence may also be reported to EPCC Police at 915-831-2200.