

El Paso Community College
Syllabus
Part II
Official Course Description

| | |
|---------------------------------|--|
| SUBJECT AREA | <u>Electrical Technology</u> |
| COURSE RUBRIC AND NUMBER | <u>ENTC 2439</u> |
| COURSE TITLE | <u>Facility Operation and Maintenance II</u> |
| COURSE CREDIT HOURS | <u>4 3 : 3</u> Credits Lec Lab |

I. Catalog Description

Provides a study of the requirements of building electrical systems, fire codes, lighting distribution, power sources, alarm systems, and interior and exterior communication.

Prerequisite: ENTC 2414. (3:3). Lab fee.

II. Course Objectives

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

- A. Practice the basic safety procedures for working on electrical systems.
- B. Identify electrical system components.
- C. Select alarm and communication systems.
- D. Define the project requirements from contract documents.
- E. Determine the required number of branch circuits for a set of loads.
- F. Determine the correct rating branch circuit loads and the preferred type of wire and size of the conductor for the branch circuit.
- G. Select the switches, receptacles, and raceways for the branch circuits.
- H. Determine the branch circuits for appliance and utilization equipment.
- I. Select and size an emergency power system.
- J. Set up and maintain a wind generator power system.
- K. Describe the basic structure of a fiber optics, voice, and video system.
- L. Determine the need for repair or replacement.
- M. Identify NEC requirements.

III. THECB Learning Outcomes (WECM)

- 1. Evaluate electrical system components.
- 2. Evaluate alarm and communication system components.
- 3. Operate a computer-aided facility management system.

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.