

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

Transfer course A.A. degree applicable course
(check all that apply)

COURSE NUMBER AND TITLE: AP E 109 Management, Fire Alarms, High Voltage Testing, and Telephone and Security Wiring.

UNIT VALUE: 4

MINIMUM NUMBER OF SEMESTER HOURS: 96

BASIC SKILLS REQUIREMENTS:

Appropriate language and computational skills.

ENTRANCE REQUIREMENTS:

PREREQUISITE: Apprenticeship Electrician 108

COREQUISITE: None.

RECOMMENDED PREPARATION: None.

SCOPE OF COURSE:

Introduction to management and marketing practices, installation of fire alarm systems and the National Electric Code as it relates to alarm installation and high voltage of telephone wiring and security systems.

SPECIFIC COURSE OBJECTIVES:

The student will be able to:

1. Explain the benefits and features of the industry's National Electric Benefit Fund.
2. Identify the positive returns realized through time spent organizing the industry.
3. Identify and explain behavior that constitutes harassment and cautions which must be observed in order to avoid litigation liability.
4. Analyze various fire alarm components and their functions.
5. Identify and explain the characteristics of latent heat of vaporization and latent heat of condensation.

6. Explain the six step troubleshooting approach.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. NEBF, Organizing and Harassment
 - A. National Electric Benefit Fund
 - B. Comet Program - Organizing and Recruiting
 - C. Harassment

- II. Fire Alarms
 - A. Basic Fire Alarm
 - B. Advanced Technology Systems
 - C. Initiating devices and indicating application
 - D. Start-up and Check Out Procedure

- III. Job Information
 - A. High Voltage Testing Safety
 - B. Preparing for H. V. Testing
 - C. Insulation Quality Testing
 - D. Acceptance and Maintenance Testing

- V. Telephone Wiring and Security Systems
 - A. Telephone Wiring and System Architecture
 - B. Twisted Pair Cables
 - C. Security Systems and Devices
 - D. Installation and Start-Up

REQUIRED READING:

Code Calculations. Upper Marlboro, MD: National Joint Apprenticeship and Training Committee, 1996.

Fifth Year Student Workbook. Upper Marlboro, MD: National Joint Apprenticeship and Training Committee, 1993.

NJATC Fire Alarms. Upper Marlboro, MD: National Joint Apprenticeship and Training Committee, 1996.

SUGGESTED READING:

Reference materials supplied by the program sponsor.

REQUIRED WRITING:

Completion of written assignments in student workbook consisting of thirty to fifty pages in length.

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short term classes.

Completion of reading assignments, research of a company's management practices and application of class and laboratory skills to practical job practices.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- lecture-laboratory combination
- directed study

This course may be offered as a distance education course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380. Yes _____ No

If yes, check all that apply. (See guidelines for preparation for definitions.)

- telecourse
- mediated instruction
- computer assisted instruction

GRADING POLICY AND STANDARDS (include methods for determining whether the stated objectives have been met by students):

5%	Workbook	A = 100 - 90
10%	Participation	B = 89 - 83
70%	Unit exams	C = 82 - 75
15%	Final exams	F = 74 and below

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?

Yes NO Number of times course may be taken for credit: 2

If yes, identify specific provision of Division 2 section(s) 55761-55763 and 58161 which qualifies course as repeatable:
58161, Part C IIA

CONTACT PERSON: Director, Vocational Programs, Ext. 2286