



# Pennsylvania State Fire Academy

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## Minimum Standard for Accreditation (MSA)

November 1996

**Course Title:** Fire and Arson Investigation - Electrical I - Overview (AREO)

**Length of Course:** 16 Hours

**Lecture/Lab Breakdown:** 14/4

**Prerequisites:** Fire/Arson Detection and Fire/Arson Investigation

**Referenced Text(s):** None (course totally built on knowledge and experience)

**Course Goal:** To expand upon a knowledge already achieved from prior courses, with an in-depth understanding of the electron behavior, and its role in the evolution of fire.

**Description of Course:** This course provides the student with minimal basic electrical knowledge, and an overview of electricity and its role in the ability to cause fire. The student will participate in class projects, and will interact with other students in solving some case histories.

**Description of Methodology to be used:** Lecture and Discussion

**Student Equipment/Supply Needs:** Pencil/Pen and Note Pad

**Equipment/Audiovisual/Supply Requirements:** Overhead Projector, TV, VCR, Chalkboard, Slide Projector, and classroom.

### COURSE OUTLINE

<u>Time</u>	<u>Content</u>	<u>Notes</u>
2:00	Review courses FAD and ARIN	
11:00	Theory - Electrical Overview	
1:00	Class interaction in groups of four	Procedures
2:00	Solving Case Histories	

**Competency Evaluation Mechanism (Brief description - attach copy):** There will be no tests or written evaluations. Students judged on their skills and knowledge displayed. Individual student will be told if he/she is not on track, and must pickup the pace if he/she desires to pass the course.

**Course Objectives (specific):** The student will:

1. understand general rules of electricity.
2. understand minimal basic electricity.
3. use proper terminology.
4. understand beading of conductors.
5. associate electrical causes with burn patterns.
6. correlate electricity with the fire service.
7. associate burn patterns with causes more accurately.

**Questions/Comments: Rita Wessel, Curriculum Specialist: Extension 106  
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