



ERNEST ORLANDO LAWRENCE  
BERKELEY NATIONAL LABORATORY

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**Environment, Health, & Safety  
Training Program**

**EHS 0540 QEW1 Electrical Safety Basics  
Course Syllabus**

**Subject Category:** Electrical Safety  
**Course Length:** 5 hours  
**Delivery Mode:** Classroom

**Course Prerequisites:** EHS 0539, EHS 0370  
**Medical Approval:** None  
**Frequency:** Every 3 years

**Course Purpose:**

This is the first course in a series required for QEW1. The course provides a foundation for workers to understand and apply ISM within the context of electrical work, associated drivers and resources available to ensure electrical safety in the workplace, including an introduction of the Lab's Electrical Safety Program from the QEW perspective.

**Course Objectives:** Upon completion of the course the student will be introduced to the following:

- ESH Manual, Chapter 8, *Electrical Safety Program* (formerly PUB-3000, Chapter 8).
- Electrical Safety Manual.
- PUB 3140 Integrated Safety Management System.
- Electrical AHJ's (Authority Having Jurisdiction) and their areas of responsibility
- Effects of electrical energy on the body.
- Electrical Injuries and Emergency Response.
- Role of the QEW1 in providing assistance to non-QEW personnel.

**Subject Matter Expert:** Mark Scott, Stephanie Collins

**Training Compliance Requirements:** LBNL Electrical Safety Manual, EHS Safety Manual (formerly PUB-3000)- Chapter 8, *Electrical Safety Program*, 29CFR 1910.147, 29CFR 1910.333, NFPA 70E

**Course Instructional Materials:** PowerPoint presentation and video

**Performance Criteria:** Student must pass a written test to demonstrate their ability to use the classroom resources provided to receive course credit.

**Web Resource:** <http://electricalsafety.lbl.gov/>, Field Guide 1