



ERNEST ORLANDO LAWRENCE
BERKELEY NATIONAL LABORATORY

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

**EHS 303 – Laser Lessons Learned Training
Course Syllabus**

Subject Category: Laser Safety

Course Length: Approximately 1 hour

Delivery Mode: Lecture- Classroom

Course Prerequisite: None

Medical Approval: None

Course Purpose: In compliance with the Special Operations Report on Laser Safety, laser safety training cannot be limited to solely web based presentation. This course will review a number of laser lessons learned and will also include a case study so that students can work to develop a critical eye for detecting possible laser safety failures before they occur.

Course Objectives:

After completing this training, the successful student will be able to:

- Using lessons learned, discuss four factors that cause a majority of laser accidents in research.
- Use brainstorming technique to develop corrective actions.
- Describe laser hazard evaluation techniques.
- Explain the role of Laser Safety Officer at LBNL.
- Given a scenario that involves a laser accident, be able to work as a team to identify actions that could have mitigated or prevented the accident.

Subject Matter Expert: Ken Barat, LBNL- Laser Safety Officers.

Lecture based Instructional Designer: Ken Barat & James Basore

Course Instructional Materials: Handout for interactive exercise and guide for laser hazard evaluation.

Performance Criteria: Employees will be asked to work in groups on a review of a laser incident. Then to document and outline incorrect steps and well as improvements that would have prevented the incident.