

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

**EHS 739/735/738 ~ Biosafety including Bloodborne Pathogen Training**

**Course Syllabus**

<b>Subject Category:</b>	Occupational Safety	<b>Course Prerequisite:</b>	No
<b>Course Length:</b>	1.25 hour	<b>Medical Approval:</b>	No
<b>Delivery Mode:</b>	Class		
<b>Schedule:</b>	Monthly or by special request		
<b>Location/Time:</b>	Bldg. 51-201		

**Course Purpose:** This course is designed to inform employees of the health risks, Biosafety levels and registration requirements for work involving biological materials, which includes work with recombinant DNA, microorganisms, cell cultures and human samples (blood, tissues and fluids). This introductory course on Biosafety (EHS 739) is mandatory *prior* to commencing work on organisms of risk group 2 or greater. It is required training for work with all biologicals. The combined course, EHS 739 ("Biosafety") and EHS 735 ("Bloodborne Pathogen Training") - or EHS 738 if it's refresher training, includes additional information on working at Biosafety level 2 with Bloodborne Pathogens and "other potentially infectious materials" as defined by and subject to the OSHA Bloodborne Pathogen Standard (29 CFR 1910.1030). OSHA Bloodborne Pathogen training is required *prior* to working with human blood, fluids, and tissues and then annually.

**Course Objectives:** EHS 739/735/738 covers the following topics:

- Definitions of biological and Biohazardous materials.
- Agent risk groups (4) and corresponding CDC/NIH Biosafety levels (4).
- LBNL's Biosafety Policy and the Role of the Institutional Biosafety Committee (IBC).
- The OSHA Bloodborne Pathogen Standard - definitions, scope, agents and risks, exposure incidents, & the Hepatitis B vaccination series (available to all potentially exposed personnel).
- Specific work practices, labeling, engineering controls, and personal protective equipment used for working at Biosafety levels 1 and 2.
- Disinfection, spill response, and proper shipping of biologicals.

**Course Instructional Materials:**

- Projector with PowerPoint slide presentation
- White Board
- Personal Protective Equipment (gloves and safety glasses)
- Biosafety labels and signs
- Examples of safety needles
- Spill response demonstration supplies
- Medical waste container with a red biohazard bag (shared with Medical Waste Group Trainer)

**Instructors:**

Rene Ricks, x4858 - Lead  
Paul Blodgett, x 6218 - Alternate

**Training Compliance Requirements:** This course is designed to explain LBNL's obligation to the National Institute of Health (NIH) and the DOE to review all work involving biologicals by use of a registration and approval process governed by the LBNL Institutional Biosafety materials, and the legally required training on work with bloodborne pathogens and other potentially infectious materials subject to the OSHA Bloodborne Standard (29 CFR 1910.1030). This course may serve as either the initial Bloodborne Pathogen Training course or an annual refresher course.

Other supervised laboratory "bench" training is also required prior to working with biologicals. The extent of this hands-on supervised training depends on the risk groups of the agents, the Biosafety level of the work, the specific tasks involved, and the prior experience and training of the personnel involved. This supervised training is the responsibility of the Principal Investigator.

**Course Handouts:**

- Course Outline
- PowerPoint presentation handouts
- OSHA Fact sheet "Reporting Exposure Incidents"
- Centers for Disease Control (CDC) "Hepatitis B Vaccine. What You Need to Know"
- OSHA Fact sheet "Hepatitis B Vaccine - Protection For You"

**Participant Evaluation:** Written evaluations regarding the effectiveness of the trainer, the training, and the visual aids.

**Written Exam:** Yes. Students must score at least 75% (6 correct out of 8) on a multiple-choice exam to pass the course.

**Practical Exam:** No

**Retraining/Recertification:** There is no retraining required for EHS 739. Retraining is required only for those subject to the OSHA Bloodborne Pathogen Standard. The initial Bloodborne Pathogen Training course is designated as course EHS 735; subsequent annual refresher training is designated EHS 738. The original training and the refresher training may be satisfied by either the live training course sponsored by EH&S or the on-line course found on the EH&S Biosafety website. [Course EHS 739 alone does not satisfy the requirement for either EHS 735 or EHS 738.]

**WEB Resource:** Yes. See "Biosafety" under the EH&S web site.