

EHS 2019 Course List

Scroll down to read individual course descriptions.

General Laboratory Safety

EHS_BLS023w	ONLINE REQUIRED Centrifuge & Rotor Safety Training
BLS025w	ONLINE REQUIRED General Laboratory Safety Training
BLS026w	ONLINE REQUIRED Hydrofluoric Acid and Ammonium Fluoride Safety in the Laboratory
BLS042w	ONLINE REQUIRED Student Laboratory Safety Training

Biological Safety

BLS008	REQUIRED Working Safely with Viral Vectors
EHS_BLS013w	ONLINE REQUIRED Autoclave Operation and Safety Procedures
EHS_BLS032w	ONLINE REQUIRED NCRC Autoclave Operation and Safety Training
BLS101w	ONLINE REQUIRED Bloodborne Pathogen Training

Radiation/Lasers

EHS_BLS005w	ONLINE REQUIRED Laser Safety Basic Training
RSS006	REQUIRED Radiation Safety Orientation
RSS103w	ONLINE REQUIRED Radionuclide Users Annual Refresher Training

Shipping

BLS204w	ONLINE REQUIRED Shipping Regulations for Shipping Materials with Dry Ice
BLS205w	Training for Receipt of Infectious Biological Materials and Dry Ice
BLS206w	ONLINE REQUIRED Shipping Chemical Preservatives
BLS209w	ONLINE REQUIRED Regulations for Shipping Biologics - Infectious Substances Category B

Respirator

BLS109w	ONLINE REQUIRED MAXAIR Powered Air Purifying Respirator (PAPR) Training
BLS110w	ONLINE REQUIRED 3M Powered Air Purifying Respirator (PAPR)

Housing Security Personnel

IHS120w	ONLINE REQUIRED Housing Security Bloodborne Pathogen (BBP) Refresher
---------	--

Housing, Michigan Dining and University Unions Personnel

IHS125w	ONLINE REQUIRED Bloodborne Pathogen Refresher for University Housing, Michigan Dining and University Unions
IHS126w	ONLINE REQUIRED Asbestos Awareness Refresher Training
OHS102w	ONLINE REQUIRED Lead Awareness Training

Ergonomics Courses

OHS001w	ONLINE Material Handling Ergonomics - ITS Tech Repair Module
OSCH005w	ONLINE Office Ergonomics for Computerized Work Stations

Other Courses

EHS_EPP106w	ONLINE REQUIRED Storm Water Pollution Prevention Plan (SWPPP) Training
IHS064w	ONLINE REQUIRED High Voltage Room Access for the Non-Electrician
IHS070w	ONLINE REQUIRED Machine Shop Responsible Person Safety

Course Descriptions

EHS_BLS005w - ONLINE REQUIRED Laser Safety Basic Training

- i. (1 Hr) EHS offers this self-study option as a way for you to review the contents of our Laser Safety Basic Training and test your knowledge by completing a short quiz of the material. Please review this information and your quiz results with your Principal Investigator (PI). A record of this review should be kept by the PI in the laboratory's Blue Binder along with other training records for safe laser use. Your laboratory PI must deliver laboratory-specific and device-specific instruction. The hands-on training provided by the lab Laser Supervisor is most important. The PI or Laser Supervisory is responsible to ensure that the trainee has a good understanding of the practices/precautions for safe use of research lasers. As with all aspects of laboratory safety, the PI is ultimately responsible to ensure their staff is properly trained. Please review the Laser Safety information and guidelines on our website. This training is NOT comprehensive; it offers only the basics as a convenience for our research community and does NOT fulfill all laser safety training requirements.
- ii. Register [here](#)

BLS008 - REQUIRED Working Safely with Viral Vectors

- a. (1 Hr) This course is designed to provide a solid background in the research risks & Biosafety management aspects of modern gene transfer technology. The course emphasizes the practical application of rDNA techniques with clear explanations of lab practices required to reduce or eliminate exposure risks. Design of experimental procedures to ensure safety and standard procedures for handling potential spills and accidents are covered in-depth. This course is intended for new or entry-level lab personnel who plan to use viral vectors in vitro or in vivo, and who cannot demonstrate significant previous experience and expertise in the necessary aspects of biosafety and regulatory compliance. Training sessions are scheduled quarterly and limited seating is available. The training is provided by the UM Vector Core

Laboratory and sanctioned by the Institutional Biosafety Committee (IBC) and the Department of Environment, Health & Safety (EHS).

- b. Register [here](#)

EHS_BLS013w - ONLINE REQUIRED Autoclave Operation and Safety Procedures

- a. (1 Hr) The Michigan Medical Waste Regulatory Act (Part 138, Medical Waste Regulatory Act, of The Michigan Public Health Code, 1978 PA368) require that “Medical Waste,” defined as “(a) Cultures and stocks of infectious agents and associated biologicals, including laboratory waste, biological production wastes, discarded live and attenuated vaccines, culture dishes, and related devices, (b) Liquid human and animal waste, including blood and blood products and body fluids, but not including urine or materials stained with blood or body fluids, (c) Pathological waste, (d) Sharps, (e) Contaminated wastes from animals that have been exposed to agents infectious to humans, these being primarily research animals” be treated prior to final disposal in order to render the waste nonhazardous. Autoclave training will cover a complete review of standard operating procedures for research autoclaves; including, basic knowledge of how an autoclave works, how to select a cycle, preparing packages for autoclaving, including what can and cannot be autoclaved, selecting primary and secondary containers, loading and unloading. Required documentation will be reviewed in addition to personal protective equipment, reporting problems, maintenance and upkeep. This course is a required course for all research autoclave users.
- b. Register [here](#)

EHS_BLS023w - ONLINE REQUIRED Centrifuge Training

- a. (60 Min) Centrifuge Training will cover the proper use and maintenance of a centrifuge and rotors.
- b. Register [here](#)

BLS025w - ONLINE REQUIRED General Laboratory Safety Training

- a. (3.5 Hr) All research laboratory personnel must successfully complete this course or an approved equivalent provided by EHS. This course is designed to provide training on the topic of laboratory health and safety with additional focus on personal protective equipment. If necessary for your research work, Bloodborne pathogens safety training is covered in another course module. The employee will be provided with general information necessary to work safely in a laboratory and understand applicable regulations, including an overview of employee rights and responsibilities. The primary regulations covered are: MIOSHA Part 431. Hazardous Work in Laboratories, MIOSHA R325.60001 Personal Protective Equipment. Additional topics related to working in laboratories are also covered including: hazardous waste management, electrical safety, understanding Safety Data Sheets (hazard communication), compressed gas cylinder safety, engineering controls, and standard operating procedures. This information is important for your safety and you must complete the entire training. Beyond this training, laboratory supervisors must provide employees with safety information/training that is laboratory-specific and focused on experimental materials & methods. Keywords: BLS 025w, BLS025, BLS 025, laboratory, safety training, general, general lab safety.
- b. Register [here](#).

BLS026w - ONLINE REQUIRED Hydrofluoric Acid and Ammonium Fluoride Safety in the Laboratory

- a. (1 Hr) This course is estimated to take 1 hour. This course will cover the U-M safety protocols for the safe use and handling of hydrofluoric acid and ammonium fluoride in the research laboratory. Special training is needed because these can cause systemic effects on the body which can lead to death. This training will cover symptoms of skin exposure, mechanism of action, tips for working with HF and NH₄F, required personal protective equipment, and what to do in case of exposure or spill. Keywords: BLS 026w, 026, hydrofluoric, acid, ammonium, fluoride, laboratory, lab
- b. Register [here](#)

EHS_BLS032w - ONLINE REQUIRED NCRC Autoclave Operation and Safety Procedures

- a. (30 Min) While there is no regulatory requirement mandating this training it is the policy of NCRC that all individuals using an autoclave at NCRC receive training in proper autoclave operations and associated safety procedures. Autoclave training will cover a complete review of standard operating procedures for research autoclaves; including, basic knowledge of how an autoclave works, how to select a cycle, preparing packages for autoclaving, including what can and cannot be autoclaved, selecting primary and secondary containers, loading and unloading. Required documentation will be reviewed in addition to personal protective equipment, reporting problems, maintenance and upkeep. This is a required course for all NCRC research autoclave users.
- b. Register [here](#)

BLS042w - ONLINE REQUIRED Student Laboratory Safety Training

- a. (2 Hr) The course is designed to provide general training on the topic of laboratory health and safety to students that take part in academic laboratories, courses, or projects that work with hazardous materials or equipment. This course does not meet the training requirements for employees (required to take BLS025W). Beyond this training lab directors, instructors, professors, or supervisors of students must provide lab-specific safety and health training focused on the hazards and materials present.
- b. Register [here](#)

BLS101w - ONLINE REQUIRED Bloodborne Pathogen Training

- a. (45 Min) This training course is intended for U-M laboratory personnel who work in a lab that has a biological safety containment level of 2 (BSL-2), this includes those who may reasonably anticipate contact with human blood, blood products, tissues, fluids or other potentially infectious materials (OPIM) including human cell lines. Training includes: Risk groups & containment determination, BSL-2 policies and practices, MIOSHA BBP training, personal protective equipment, biosafety cabinets and aerosols. Procedures for the safe handling of sharps, waste, spills, as well as reporting for injuries and/or exposures are covered. U-M laboratory personnel who may reasonably anticipate contact with human blood, blood products, tissues, fluids or other potentially infectious materials (OPIM) , including human cell lines during the performance of their duties must complete an annual BBP refresher training course such as BLS101w
- b. Register [here](#)

BLS109w - ONLINE REQUIRED MAXAIR Powered Air Purifying Respirator (PAPR) Training

- a. (30 Min) The MAXAIR Powered Air Purifying Respirators optimize respiratory protection against airborne (aerosol and droplet) particulates. MAXAIR is an advanced respiratory protection system meeting all OSHA PAPR requirements for hospital infection control, emergency preparedness, ED, Employee Health and Safety, and aerosol generating procedures. This course covers equipment inspection, battery testing, airflow testing, filter replacement, and donning/doffing of Powered Air Purifying Respirators (PAPR). This course is required for all PAPR users and annual retraining is required.
- b. Register [here](#)

BLS110w – ONLINE REQUIRED 3M Powered Air Purifying Respirator (PAPR)

- a. (30 Min) This course focuses on the functions of the 3M AirMate Belt Mounted High Efficiency PAPR and the 3M Versaflo TR-600 PAPR. We will be discussing how to configure and maintain your systems. This course will cover replacement parts, cleaning, and system assembly for this system. For more information please call the 3M Technical Service Hotline at 1-800-243-4630.
- b. Register [here](#)

BLS204w - ONLINE REQUIRED Shipping Regulations for Shipping Materials with Dry Ice

- a. (1 Hr) Dry ice is a hazardous material and is regulated by both the U.S. Department of Transportation (DOT) and the International Air Transport Association (IATA). Specific procedures are required for handling, packaging, and shipping materials refrigerated with dry ice and this training must be documented and repeated every two years.

- b. Register [here](#)

BLS205w – Training for Receipt of Infectious Biological Materials and Dry Ice

- a. (20 Min) Individuals who receive and/or handle shipments containing infectious biological materials and dry ice are required to be trained in the recognition of hazardous materials, the precautions that should be taken when handling these items and what steps to take if there is a leak or problem with the package. This training is available in an online format and must be completed every two years.
- b. Register [here](#)

BLS206w – ONLINE REQUIRED Shipping Chemical Preservatives

- a. (20 Min) Biological specimens that contain chemical preservatives such as ethanol, formaldehyde or formalin are regulated as hazardous materials by both the U.S. Department of Transportation (DOT) and the International Air Transport Association (IATA). Hazardous materials are generally defined as any substance that could adversely affect the safety of the public, handlers or carriers during transportation. Shipments of hazardous materials must be packaged, marked and accompanied by a dangerous goods declaration. Certain hazardous materials are exempt from shipping requirements when shipped in small quantities. These materials may be shipped as “Dangerous Goods in Excepted Quantities” with an “Excepted Quantities” label instead of completion of a Dangerous Goods declaration.
- b. Register [here](#)

BLS209w - ONLINE REQUIRED Regulations for Shipping Biologics - Infectious Substances Category B

- a. (45 Min) Shipments of certain biological materials are regulated domestically by the Department of Transportation (DOT) as well as the Federal Aviation Administration (FAA), and the International Air Transportation Association (IATA), if sent internationally. Any students or University employees involved in packaging materials, preparing samples for shipping, handling such packages, preparing related paperwork, or signing to authorize shipments must undergo specific training and maintain records of this training (i.e. by printing a copy of your training certificate from My LINC). Following the completion of this training, University personnel can be qualified to prepare and ship packages containing exempt specimens, genetically modified organisms (GMOs), and category B substances. Information on shipping these materials with dry ice and chemical preservatives is also included in this training. This training must be retaken every two years.
- b. Register [here](#)

EHS_EPP106w – ONLINE REQUIRED Stormwater Pollution Prevention Plan (SWPPP) Training

- a. (30 Min) All operational personnel at applicable fleet maintenance and storage yards/facilities must complete this annual training or complete an approved equivalent. This course is designed to provide training on the components and goals of a Stormwater Pollution Prevention Plan (SWPPP). Applicable fleet maintenance and storage yards/facilities include: U-M Ann Arbor Waste Management, North Campus Facility Services, Fuller St. Grounds, Heavy & Light Equipment Garages, North Campus Grounds, Transportation Services on Kipke Drive and Baxter Road Fueling Station; U-M Flint Facilities and Operations Complex; and U-M Dearborn Grounds Building. The U-M NPDES permit, Stormwater Management Plan requires that SWPPPs be prepared for fleet maintenance and storage yards/facilities, and annual SWPPP training be completed for operational personnel.
- b. Register [here](#)

IHS064w - ONLINE REQUIRED High Voltage Room Access for the Non-Electrician

- a. (30 Min) This course is required for personnel (non-electricians) who may need to enter High Voltage Rooms (unescorted) during their work duties. Occupations may include engineers, architects, custodial, maintenance, IT and fire safety personnel. The course will teach personnel to safely enter High Voltage Rooms to perform non-electrical tasks. This course meets MiOSHA Part 40, Electrical Safety Related Work Practices.
- b. Register [here](#)

IHS070w - ONLINE REQUIRED Machine Shop Responsible Person Safety

- a. (30 Min) Per EHS's Machine Shop Safety for Academic Departments Guideline, all Machine Shop Responsible Persons ("Responsible Persons") as well as all designated Machine Shop Monitors ("Monitors") are required to successfully complete this training module. This is initial, one-time training, but re-training may be necessary if there is a change in job assignment, change in machine tool or equipment use, or additional jobs present new hazard(s) or should the Machine Shop Guideline change. EHS may also recommend re-training based on the results of safety inspections or based on shop conditions or activities.
- b. Register [here](#)

IHS120w - ONLINE REQUIRED Housing Security Bloodborne Pathogen (BBP) Refresher

- a. (1 Hr) This online training course is required to be taken annually by UM Housing Security Personal who may reasonably anticipate contact with human blood, blood products, tissues, fluids, or other potentially infectious materials (OPIM) during the performance of their duties. This training provides the initial training and an annual review of blood borne pathogen exposure control principles, practices, and requirements in the Michigan Occupational Safety Health Act (MOISHA) Bloodborne Infectious Diseases Regulation (rules 325.70001 - 325.70018).
- b. Register [here](#)

IHS125w - ONLINE REQUIRED Bloodborne Pathogen Refresher for University Housing, Michigan Dining and University Unions

- a. (1 Hr) This online training course is required to be taken annually by University Housing Facilities, Michigan Dining and University Unions personnel who may reasonably anticipate contact with human blood, blood products, tissues, fluids or other potentially infection materials (OPIM). This training provides an annual review of bloodborne pathogen exposure control principles, practices, and requirements in the Michigan Occupational Safety and Health Act (MIOSHA) Bloodborne Infection Diseases regulation (Part 554).
- b. Register [here](#)

IHS126w - ONLINE REQUIRED Asbestos Awareness Refresher Training

- a. (30 Min) This refresher course is required annually for maintenance and custodial personnel who may contact asbestos during their work duties. The course covers the uses and forms of asbestos, health effects of exposure, locations of asbestos containing building materials, how to recognize damaged, deteriorated and delaminated asbestos. This refresher course meets OSHA 29 Code of Federal Regulations (CFR) Part 1910.1001, Asbestos and MiOSHA Part 305, Asbestos for General Industry. The initial course is 2 hours in length and must be scheduled directly with EHS IH&S staff (647-1142).
- b. Register [here](#)

OHS001w - ONLINE Material Handling Ergonomics

- a. (30 Min) Material Handling for ITS Tech Repair is an electronic learning module that will address how back injuries can be avoided. This is a customized training designed to address the unique situations found in handling computer equipment and printers for delivery, pick up and installation.
- b. Register [here](#)

OHS102w – ONLINE REQUIRED Lead Awareness Training

- a. (45 Min) This annual training course covers general lead awareness and associated hazards for Housing Facilities and Michigan Dining personnel. Please note that an annual refresher is required. This course covers topics related to the general awareness of lead containing materials and their associated hazards. The course fulfills the requirements of the Michigan Occupational Safety and Health Administration General Industry Health Standard, Part 310 and Construction Health Standard Part 603, Lead in Construction.
- b. Register [here](#)

OSCH005w – ONLINE Office Ergonomics for Computerized Work Stations

- a. (30 Min) This online office ergonomic training offers the viewer a practical step by step guide to adjusting a computerized work area to support the body in a neutral posture. This session covers adjustments to the chair, keyboard, mouse and monitor (height/distance). It is designed so the viewer can make necessary adjustments to the workstation while reviewing the course, these adjustments will take approximately 10-15 Minutes.
- b. Register [here](#)

RSS006 - REQUIRED Radiation Safety Orientation

- a. (2 Hr) To address the issue of training by State & Federal regulation, EHS has implemented training for all individuals working in or frequenting radioactive material laboratories or facilities. The course must be completed within 60 days of starting work with radioactive materials or supervising individuals who will work with radioactive materials. This training satisfies Nuclear Regulatory Commission (NRC) regulation 10 CFR 19.12 - Instruction to workers.
- b. Register [here](#)

RSS103w - ONLINE REQUIRED Radionuclide Users Annual Refresher Training

- a. (30 Min) This is an online presentation of the EHS Radiation Safety Service Annual Refresher Training. All active users of radioactive material need to review the material presented in the following slides and complete the assessment questions.
- b. Register [here](#)