STUDENT HEALTH AND SAFETY TRAINING PROGRAM

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SCOPE AND APPLICATION

This program applies to all Cal Poly student activities, including attending classes, conducting research, and participating in club events where potential risk of exposure to known hazards, such as biological, chemical, and/or physical hazards are present

This program does not apply to student employees who are covered by the requirements of the Injury and Illness Prevention Plan (IIPP) when working as a paid employee for the university.

ROLES AND RESPONSIBILITIES

1 EHS Program Administrator:

1.1 Establishing, communicating and maintaining this program in accordance with applicable California State University Executive Orders;

1.2 Identify and communicate appropriate training content required by this program to maintain compliance with this program;

1.3 Conducting program reviews and communicating the results to organizational leadership;

1.4 Tracking and trending results of program review by college;

1.5 Upon request, EH&S staff shall collaborate with faculty and their academic departments on hazard identification and assessment to help determine and develop student training needs;

1.6 Reviewing and updating the program.

2 AVPs/Deans:

2.1 Communicate program requirements to directors and department chairs;

2.2 Ensure adequate resources are available to directors and department chairs/heads to implement and maintain program;

2.3 Request feedback from directors and department chairs on the communication and implementation of this program;

2.4 Set priorities for the college and/or department on implementation and maintenance with assistance from EHS.

3 Directors/Department Chairs:

3.1 Communicate program to all faculty and staff;

3.2 Provide support to managers, supervisors, faculty/principal investigators, club advisors, and staff to communicate, implement and maintain program;

3.3 Request feedback from managers, supervisors, faculty/principal investigators, club advisors and staff on the communication and implementation of this program;

3.4 Set priorities for managers, supervisors, faculty/principal investigators, club advisors and staff on implementation and maintenance of the program with assistance from EHS;

4 Faculty, Principal Investigators, Lecturers, Lab Supervisors, Club Advisors:

4.1 Be familiar with the current requirements of this program;

4.2 Ensure that all student training is performed and recorded in accordance with this program;

4.3 Identify hazardous conditions or operations by performing a hazard assessment. Eliminate or reduce hazards when possible. Changes in processes/conditions may require a reassessment of hazards;

4.4 In a laboratory containing hazardous chemicals under their control perform hazard assessments at least annually, using the Risk and Safety Solutions (RSS) module Assessment. Eliminate or reduce hazards when possible. Changes in processes/conditions require a reassessment of hazards;

4.5 Ensure students who are exposed to recognized hazards in teaching and/or research shops, labs or clubs receive relevant information and appropriate health and safety training

4.6 Ensure students working in a research laboratory read, understand and follow the guidance provided in the current RSS Hazard Assessment report.

4.7 Evaluate the safety performance of students in teaching or research, shops, labs and educational clubs to ensure the required safety practices, equipment (including personal protective equipment and engineering controls), and techniques are being appropriately employed;

4.8 Promptly report serious injuries or accidents by calling 911.

4.9 Work with their department safety coordinator and EHS to implement program requirements.

5 Students:

5.1 Following the health and safety requirements described in this program and in the hazard assessment and safety procedures required by your course, research project or student club;

5.2 Report hazards, injuries, illnesses and near misses to your supervisor, faculty, instructor, EHS or department safety coordinator;

5.3 Attend, complete and follow the directions provided in the required health and safety training;

5.4 Review this program and associated hazard assessments prior to working with biological, chemical, and/or physical hazards;

5.5 Perform work in laboratory and shop areas in a safe and reasonable manner.

REQUIREMENTS

1 Program Requirements:

1.1 Required Student Safety Training

a. Faculty, principal investigators, lecturers, lab supervisors, club advisors will communicate any known hazards and corresponding required safeguards to students prior to potential exposure to biological, chemical, and/or physical

b. Students shall receive initial training prior to exposure to biological, chemical, radiation and/or physical hazards;

c. The process for reporting safety hazards or concerns;

d. A review of hazard assessments completed for the work area including hazards present and the required control measures to prevent injury;

e. Proper use of any required personal protective equipment, such as safety glasses/goggles, hand protection, foot protection, etc. required for the activity;

1.2 Required Student Safety Training Documentation:

a. Completion of hazard specific online training program e.g., via Skillsoft for Students or;

b. Documentation to include understanding of content of department specific student training platforms, such as PolyLearn, Dozuki, etc. via quiz,

c. or student signature on training sign-in sheet attached to copy of training content, see Attachment A for example.

d. Student training shall be documented and the records shall be maintained by each department for three years.

e. Training records shall be available for review by EHS and internal or external auditors.

END of Requirements

DEFINITIONS

Administrative control- (or work practice controls) are changes in work procedures such as written safety policies, rules, supervision, schedules, and training with the goal of reducing the duration, frequency, and severity of exposure to hazardous chemicals or situations.

Engineering controls- methods of controlling occupational exposure to injurious materials or conditions by means of general or local exhaust ventilation, substitution by a less hazardous material, by process modification, or by isolation or enclosure of health hazard-producing operations or machinery.

Harmful exposure-an exposure to dusts, fumes, mists, vapors, or gases:
(a) In excess of any permissible limit prescribed by Section 5155; or
(b) Of such a nature by inhalation as to result in, or have a probability to result in, injury, illness, disease, impairment, or loss of function.

Hazard- a source of risk, danger, or peril capable of causing injury. Examples: dusts, fumes, mists, vapors, gases or chemicals capable of producing adverse health effects.

Hazardous chemical or substance- a substance, material, or mixture which by reason of being explosive, flammable, poisonous, corrosive, oxidizing, an irritant, or otherwise harmful, is likely to cause injury or illness.

Health hazard- a chemical that is classified as posing one of the following hazardous effects: Acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenic; reproductive toxicity; specific target organ toxicity (single or repeated exposure); aspiration hazard.

Laboratory- a facility where the "laboratory use of hazardous chemicals" occurs. It is a workplace where relatively small quantities of hazardous chemicals are used on a non-production basis.

Laboratory supervisor -the person with overall authority for laboratory operations in a department or other instructional or administrative unit, such as the course or laboratory instructor and/or the department chairperson/head and/or the College Dean. In research laboratories, this would be the Principal Investigator (P.I.) or faculty directing the research.

Laboratory use of hazardous chemicals- handling or use of such chemicals in which all of the following conditions are met:

(1) Chemical manipulations are carried out on a "laboratory scale";
(2) Multiple chemical procedures or chemicals are used;
(3) The procedures involved are not part of a production process, nor in any way simulate a production process; and
(4) "Protective laboratory practices and equipment" are available and in common use industry-wide to minimize the potential for employee exposure to hazardous chemicals.

Physical hazard- Physical hazards cause injury when an object, piece of equipment or material comes in contact with the body. Physical hazards are often associated with an uncontrolled source of energy; kinetic, electrical, pneumatic, hydraulic, etc.

Symptom- central nervous system effects such as headaches, disorientation, dizziness, fatigue, and decreased attention span; skin effects such as chapping, erythema, cracked skin, or skin burns; and cardiac effects such as chest pain or shortness of breath.

IMPLEMENTATION RESPONSIBILITIES

EH&S will communicate the requirements of this program to the impacted colleges and departments. Department leadership is responsible for determining which of their employees are covered by this program.

GOVERNING DOCUMENT

Safety and Health Executive Order 1039

COMPLIANCE REQUIREMENT / REGULATORY COMMITMENT

REFERENCE DOCUMENTS

Developmental References:

National Research Council, Prudent Practices in the Laboratory, National Academy Press, 1995

Supplemental References: NA

NA

ATTACHMENTS

1 GENERAL SAFETY RULES FOR EDUCATIONAL ACTIVITY

APPENDICES

APPENDIX A: AVAILABLE COURSES FOR TRAINING IN POLYLEARN

APPENDIX B: List of Training Courses available in Skillsoft for Students

DOCUMENT RECISION

NA

DOCUMENT APPROVER

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REVISION NOTES

Where?	What Changed?

ATTACHMENT A: GENERAL SAFETY RULES FOR ACTIVITY/ LAB 101 (PAGE 1)

Note: Example only*- Faculty should develop general safety rules based on hazards in lab, shop or activity.*

Please read and abide by these laboratory safety rules:

1. Absolutely, no eating or drinking in the lab.

2. Protective eyewear must be worn at all times in the laboratory while handling glassware (impact glasses), while chemical work is being performed (splash goggles), or while soils are being ground and/or sieved (impact glasses).

3. Some laboratory exercises will require the use of additional Personal Protective Equipment (PPE). Your instructor will inform you when additional PPE is required.

4. For health and safety reasons, it is highly recommended you report a significant physical or medical condition such as pregnancy, chemical allergy (e.g. latex, iodine), etc. to your instructor.

5. Closed shoes must be worn at all times in the laboratory.

6. Some laboratory exercises will be in the field. Wear appropriate clothing, including closed shoes or work boots.

7. Tie long hair back.

8. Learn the location and proper use of safety equipment, eyewash, safety shower, spill kit, lab phone and emergency procedures.

9. Keep your work area neat.

10. Clean up and dispose of spilled chemicals correctly and immediately. Notify the instructor.

11. Dispose of broken glass in a puncture resistant container and label “Caution- Broken Glass” before disposing. Notify the instructor. Never put broken glass in the trashcans, always use the special box.

12. Mop up spilled water immediately, especially if it is spilled on the floor. Notify the instructor.

13. Notify the instructor immediately if you injure yourself (cut yourself on broken glass, for example).

14. No “horseplay” in the lab or field.

15. Wash your hands with soap and water before taking a break or before leaving the laboratory for the day.

Print your name and signature on next page.

GENERAL SAFETY RULES FOR CLASS LAB 101 (PAGE 2)

I have read, do understand, and agree to abide by the rules listed on the other side of this document

Date: _____ Class & Section: _____

	Student Name (please print)	Student Signature
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APPENDIX A: AVAILABLE COURSES FOR TRAINING IN POLYLEARN

Note: All courses listed are identified for general safety training in specific areas and shall not be replaced with project or activity specific safety training. Contact EHS for instructor access to courses below.

1 **Hazardous Material Safety Training -** This is an introductory safety training course for campus individuals working with or around hazardous materials. The goal of the course is to give an introduction of how to keep yourself and those around you safe when dealing with hazardous materials, and what to do in the case of a spill or an emergency.

2 **General Biosafety Training-** this course is designed for anyone working with biohazardous materials including blood or other potentially infectious material (OPIM) on campus. Course covers general microbiological work practices, risk groups, biosafety level containment procedures, emergency response, and biohazardous waste procedures.

APPENDIX B: List of Training Courses available in Skillsoft for Students

Note: All courses listed are identified for general safety training in specific areas and shall not be replaced with project or activity specific safety training. This is not a comprehensive list of training courses in Skillsoft for Students.

General Safety Courses	Description	Duration:
Hazard Communication- Cal OSHA Audience: students working with hazardous chemicals that is NOT a chemistry/biology or other laboratory environment. Shops, theater, automotive, farm/agriculture areas, etc. ID: ehs_cal_a06_sh_enus	This course will acquaint you with the precautions that both you and an employer must take in order to safely use, handle, and dispose of hazardous chemicals in the workplace. Learner objectives are to identify the routes of chemical entry into the body, define various categories of chemical hazards, interpret warning labels, interpret information commonly found in a Safety Data Sheet (SDS), and identify types of controls commonly used to reduce or eliminate contact with hazardous materials in the workplace.	45 min.
CSU- Shop Safety Audience: Students working in a shop environment. ID: _scorm12_spcentralsta_csushopsafety	Recognize roles and responsibilities for work in a shop. Identify common physical and chemical hazards. Apply a process to control the hazards. Use of safe work practices when working in a shop.	16 min.
Hand and Power Tool Safety Audience: Students working with hand and power tools (shops). ID: ehs_hsf_b01_sh_enus	General basic safety rules when using tools. Learn how to identify hazards and safety controls associated with hand tools. Introduction to general safety guidelines as well as specific precautions for using power tools.	18 min.
Ladder Safety Audience: Students working on ladders. ID: esh_sah_b31_sh_enus	Learner objectives are to identify hazards related to the general use of ladders and how to control these hazards. Describe the types of portable ladders and their use, capacities, and safety considerations, describe the specific use, capacities, and safety features of fixed ladders, and specify proper guidelines for ladder care and maintenance.	24 min.
Compressed Gas Safety Audience: Students working with compressed gas cylinders. ID: ehs_hsf_c12_sh_enus	This course will go over the identification of the hazards associated with compressed gases, requirements for cylinder marking, proper storage precautions, general safety precautions for using and handling, leak detection, requirements for safe handling for compressed gases and poison inhalation hazard materials and cryogenic gases.	28 min.

General Safety Courses	Description	Duration:
CSU- Utility Trailer Towing Safety for CSU **Audience:** Students who will be towing a trailer as part of an educational activity. ID: _scorm12_spcentralsta_csu_trailer_safety	Introductory training on how to hitch a trailer, trailer components, how to distribute weight properly, steps to safely towing a trailer, and how to drive through different weather conditions. Note: All drivers on University business must be authorized before driving. Please see Driver Safety page.	15 min.
Lockout/Tagout- Cal/OSHA **Audience:** Students who require the operation or use of a machine or equipment on which servicing or maintenance is to be performed, or work in an area in which such service or maintenance is being performed. ID: ehs_cal_a17_sh_enus	The intent of the course is to provide information on lockout/tagout practices and the significance of lockout/tagout devices. Learner objectives are to define terms commonly used in a lockout/tagout program, describe specific lockout/tagout techniques commonly used in a lockout/tagout program, and recall standard lockout/tagout procedures.	22 min.
Global Safety Principles: Machine Guarding 2.0 **Audience:** Students who use power tools and machines during the course of their work. ID: ehs_hsf_c16_sh_enus	This course will provide instruction on the following objectives: • identify the particular areas where mechanical hazards exist in machines, • identify the mechanical point on a machine where hazardous actions are most likely to occur, • identify actions that can result in injury, • recognize the minimum requirements that must be met by all safeguards, • recognize the advantages of various types of guard construction, and • recognize descriptions of different types of safety guards and devices.	20 min.
Laboratory Safety Courses		
For Users of Radioactive Materials **Audience:** Student users of sealed and unsealed sources of radioactivity**.** ID: _scorm12_spcentralsta_radiationsafety	This course focuses on the basics of radiation safety. All persons anticipating to work with radioactive materials must complete this course even if the worker has used radioactivity at another institution.	1 hr.

Laboratory Safety Courses- cont.	Description:	Duration:
Cal Poly SLO Hazardous Waste Training **Audience:** All students who generate or handle hazardous waste while doing research or special projects. ID: _scorm12_spcentralsta_cal_poly_hazardous_waste	Techniques and rules for handling and generating hazardous waste.	22 min.
Fundamentals of Laser Safety **Audience:** students working with lasers in campus activities. ID: _scorm12_spcentralsta_stc_lasersafetyfund	Course provides instruction on lasers and laser safety. Includes instruction on the primary differences in Class1, Class 2, Class 3R, Class 3B, and Class 4 lasers; characteristics of laser light, effects of lasers on skin, eyes; laser control measures and non-bean hazards.	1 hr.
Laboratory Safety Fundamentals **Audience:** Students working with chemicals in a laboratory setting. ID: _scorm12_spcentralsta_labsfty	Introduction to Laboratory Safety Fundamentals. Topics include analyzing hazards, controlling exposure and minimizing risk, and vigilance in the laboratory. This is a comprehensive laboratory safety training.	2.5 hrs
Laboratory Safety- Cal/OSHA **Audience:** students working with hazardous chemicals in a laboratory setting. ID: ehs_cal_a20_sh_enus	Safe Laboratory Work Practices and Regulations that includes, identify requirements of the Laboratory Safety Standard, identify characteristics of a workplace Chemical Hygiene Plan, identify laboratory safety guidelines, and identify good practices to follow in the prevention of laboratory fire and burn hazards. This is not a comprehensive training, however a good introduction to Chemical Hygiene Plan and basic lab safety.	22 min.
Biosafety Cabinets **Audience:** Any student that works with biohazardous material in a biosafety cabinet must take this course. ID: _scorm12_spcentralsta_biosafetycabinets	This course is designed to familiarize you with the safe use of biological safety cabinets (BSC). Reviews the various types of BSCs and their uses, the rules for acquisition, installation, certification, and best practices when using BSCs in laboratories.	25 min.

Laboratory Safety Courses, cont.	**Description:**	**Duration:**
Bloodborne Pathogens Awareness-Cal/OSHA **Audience:** Any student who works with human or primate blood, body fluids or other potentially infectious material (OPIM). ID: ehs_cal_a03_sh_enus	Learner objectives for this course are to identify bloodborne pathogens and symptoms of bloodborne diseases, identify modes of transition of bloodborne pathogens, recognize the proper use and handling of personal protective equipment, identify measures to be taken when the skin or eyes are exposed to infectious material, and specify the components of an Exposure Control Plan.	46 min.