

STUDENT SAFETY PROGRAMS

Safety Manual Table of Contents

I.	INTRODUCTION	-----2-3
II.	SCOPE	-----2-3
III.	DEPARTMENT RESPONSIBILITY TO WRITE PROGRAMS	-----2-3
IV.	INSTRUCTION	-----2-3
	A. Instructor Status	
	B. Student Instruction and Training	
V.	SUPERVISION	-----2-5
VI.	GRADUATE ASSISTANTS (GA's)	-----2-5
	A. Statement of Responsibility	
	B. Required Training for GA's	
VII.	CONTROL MEASURES	-----2-7
VIII.	MEDICAL CONSULTATION/EXAMS	-----2-7
IX.	INCIDENT REPORTS	-----2-7
X.	DOCUMENTATION	-----2-8
XI.	OVERSIGHT AND ENFORCEMENT	-----2-8
XII.	SPECIFIC PROGRAMS	-----2-8

STUDENT CHEMICAL SAFETY

XIII.	INTRODUCTION AND SCOPE	-----2-9
XIV.	INSTRUCTION	-----2-9
	A. Employee Training	
	B. Student Instruction and Training	

Environmental Health & Safety Manual

Student Safety

XV. [CONTROL MEASURES](#) -----2-10

A. [Personal Protective Equipment \(PPE\)](#)

B. [Other Required Safety Devices](#)

STUDENT BIOLOGICAL SAFETY

XVI. [INTRODUCTION AND SCOPE](#) -----2-11

XVII. [INSTRUCTION](#) -----2-11

A. [Employee Training](#)

B. [Student Instruction and Training](#)

XVIII. [CONTROL MEASURES](#) -----2-13

A. [Required Safety Devices](#)

B. [Engineering and Work Practice Controls](#)

C. [Personal Protective Equipment \(PPE\)](#)

D. [Special Controls](#)

[APPENDIX A - INCIDENT REPORT FORM](#) -----2-14

Environmental Health & Safety Manual

Student Safety

STUDENT SAFETY

I. INTRODUCTION

The University of Wyoming (UW), in its Agenda 2000, has stated that one of its goals is "to provide a safe, fair, and efficient environment in which to learn and work." Although many programs exist to ensure employee safety, student safety is equally as important. This program is designed to minimize exposure of students to hazardous situations in the academic setting.

II. SCOPE

This program applies to all departments that expose students to potentially hazardous situations in the academic setting. The requirements of this program are directed toward students who are not employed by the university, but are being exposed to potential hazards in courses that are listed in the University of Wyoming Bulletin.

III. DEPARTMENT RESPONSIBILITY TO WRITE PROGRAMS

Each department that exposes students to hazardous situations in the academic setting is responsible for developing a student safety program (or programs, if the department so determines), which is consistent with current UW programs (i.e. Chemical Hygiene Program, Exposure Control Program, Radiation Safety Manual), and implementing the provisions found in this program.

Departments shall review all hazards to which students might be exposed and are responsible for writing operational procedures to safeguard the student. Non-exclusive examples of hazards include: animal handling, hazardous chemicals, pathogens, non-ionizing radiation, thermal hazards, sharps, mechanical equipment, cutting tools, high pressure, and electricity. Specific requirements for chemical and biological safety are included at the end of this program. The UW Radiation Safety Manual covers any student using radioactive materials. No one under the age of 18 is allowed in controlled radioactive areas unless under a guided tour or in training. Trainees must be approved in writing by the Radiation Safety Officer and must wear the appropriate monitoring equipment.

All departments will include in their program information on what to do in case of fire: pull the fire alarm, call 911, and evacuate the building. Any department expecting individuals to use fire extinguishers shall provide training in the use of them.

IV. INSTRUCTION

Students have a right to know about hazardous situations that may exist in an instructional setting. Instructors in courses and authors of texts and laboratory manuals have a professional and moral obligation, and a legal incentive, to minimize hazards before an exercise is presented to a student. All instructors shall be

Environmental Health & Safety Manual

Student Safety

knowledgeable about the hazards in the course they are instructing.

Any course that involves the use of hazardous materials or hazardous equipment, or involves a hazard to the student will devote some time to instruction in safe handling, use or procedures to follow. This instruction will be documented in the syllabus for the course, with an indication of the time devoted to such instruction. The amount and extent of the instruction will depend upon the particular course and hazards presented.

Specific programs for chemical safety and biological safety are addressed in further detail in this program. If these programs require more detail for specific instruction, departments must address those details in their program(s).

A. [Instructor Status](#)

1. Academic faculty, instructors, teaching assistants, and any others delivering professional instruction to students in laboratories or any other instructional situations on a regularly scheduled basis that fall under the scope of this program will be UW employees.
2. In the case of guest instructors, student teachers, and anyone else involved in instruction of students in regularly scheduled courses, who are not UW employees, the instructor in charge of the course will assume the responsibility for any hazards in the course. Instructors are responsible for safety of visitors, as appropriate.

B. [Student Instruction and Training](#)

1. A course that involves the use of hazardous materials or hazardous processes will devote some time to instruction in the safe handling or practice of the materials or process. This instruction will be documented in the syllabus for the course with an (some) indication of the time devoted to such instruction.
2. Amount and extent of instruction will depend on the particular course, and will be determined to a large extent by the department offering the course.
3. A manual or handouts used in the course must indicate the existence of the hazard as part of the written procedure. Any manual or handouts lacking this information as an integral written part of the procedure must be supplemented with the necessary information.

Environmental Health & Safety Manual

Student Safety

V. SUPERVISION

In any hazardous situation, students shall be directly supervised. Students using hazardous chemicals, the faculty member in charge of the course or a properly trained teaching assistant shall constantly supervise infectious materials or bio-hazardous agents. If for any reason constant supervision in these situations cannot be maintained, the use of the hazardous material must cease until supervision can be re-established. In all other hazardous situations, departments must define the supervision level based on the degree of the hazard found in their courses.

VI. GRADUATE ASSISTANTS (GA's)

Instructors have professional, legal and moral obligations to minimize hazards before an exercise is presented to a student. GA's have the right to be adequately trained to deal with these responsibilities before they begin instructing students. It is realized every hazardous situation cannot be avoided.

All GA's who instruct in a classroom or laboratory situation will be expected to be trained in applicable university safety policies, responsibilities and procedures. Additionally all GA's are expected to be trained in their specific Departmental Safety Program responsibilities and procedures.

A. Statement of Responsibility

GA's who supervise or assist in supervising a class are responsible for the safe use of chemicals, hazardous equipment and materials in their class.

Other responsibilities include:

1. Instructing students in university and departmental safety procedures (including the use of engineering and work practice controls, personal protective equipment and any special controls).
2. Enforcing classroom safety standards.
3. Correcting practices / conditions that may result in personal injury.
4. GA's immediately notifying Environmental Health and Safety, EHS (ext. 3277) of any significant accident and/or incident which results in the exposure to chemicals and/or pathogens to personnel and/or the environment. Also documenting to EHS and other authorities in a timely fashion any case of personal injury to a student.
5. GA's Setting a good example by using proper safety equipment and procedures as specified by the university and their department.

Environmental Health & Safety Manual

Student Safety

6. Recognize emergencies which are life threatening and respond in an effective way, including activation of Emergency Medical System (EMS) - Dial 911.

B. [Required Training for GA's](#)

1. GA's will attend the overview class on Right-to-Know/Hazard Communication offered by EHS. GA's involved in teaching laboratories which involve the use of chemicals of any sort will attend the classes on Chemical Hygiene and Fume Hoods offered by EHS instead.
2. Familiarity with all applicable policies (e.g. Blood Borne Pathogen, Chemical Hygiene, Radiation Safety, etc) in the UW Environmental Health and Safety manual is also expected. These policies can be found in the EHS office, 312 Merica Hall.
3. Training: in Emergency Response to Personal Injury (Adapted from American Red Cross ['Til Help Arrives](#), January 1993, approximately 30 minutes) will be provided by the university. This training will include:
 - a. Responding to emergencies
 - b. GA's will be encouraged to obtain further training in CPR and First Aid.
4. Department faculty/staff supervisor of the GA will be responsible for timely additional training specific to the discipline. Minimum expectations for this training include:
 - a. A familiarity with hazards (chemical and physical) associated with the classroom exercises.
 - b. Instruction in departmental procedures for:
 - (1) Proper safety precautions
 - (2) Waste minimization
 - (3) Waste disposal
 - (4) Emergency response to accidents
 - (a) Dealing with a spill and using spill kits
 - (b) Dealing with the injured
 - (c) Dealing with a fire
 - (d) Building evacuation
 - (e) Notifying appropriate agencies (EHS, Fire Department, etc.)
 - (f) Records
 - (5) MSDS storage

Environmental Health & Safety Manual

Student Safety

VII. CONTROL MEASURES

Engineering controls shall always be the primary control technique (i.e. substitution of materials or processes, isolation, and ventilation). Elimination of the hazard is always more desirable than issuing personal protective equipment (PPE).

If there are no viable alternatives for hazard control, PPE should be employed, but in most cases only as a last resort. Some UW policies require PPE regardless of control measures, such as the Eye Protection Policy. The responsibility for purchase of PPE for students will be at the discretion of the department. PPE will vary depending on whether the hazard is biological, chemical radiological, physical or some combination (refer to applicable section).

Environmental Health and Safety personnel will provide guidance and assistance on proper PPE selection, if requested.

VIII. MEDICAL CONSULTATION/EXAMS

In any hazardous situation where students are injured, the highest priority is that the student is treated in an appropriate and timely fashion. Departments should recommend that students visit Student Health Services, their own doctor, or Iverson Memorial Hospital for medical care, if needed. All medical consultations and/or exams shall be performed by or under the direct supervision of a licensed physician. Departments may recommend that students carry health insurance.

All claims for a medical consultation/exam should be made through the Risk Management Office.

Refer also to the Chemical Safety Program and the Biological Safety Program.

IX. INCIDENT REPORTS

All accidents involving students shall be reported on the University of Wyoming Incident Report. An example is included, as Appendix A. If the accident involves exposure to a hazardous chemical, the specific chemical must be identified on the form and the MSDS(s) made available to the student. If the accident involves an infectious agent, the specific agent and the source must be identified on the Incident Report. In all cases, a responsible contact person who is knowledgeable about the incident must be identified on the form.

Major or serious accidents should be reported immediately to EHS (ext. 3277).

A copy of the report shall be retained in the department; a copy sent to Risk Management (Merica Hall) within 10 working days; a copy given to the student; and one sent with the student to the medical caregiver.

Environmental Health & Safety Manual

Student Safety

X. DOCUMENTATION

Departments shall keep copies of syllabuses and records of training for teaching assistants for at least four years. Departments are also responsible for maintaining copies of incident reports for at least four years.

XI. OVERSIGHT AND ENFORCEMENT

Environmental Health and Safety is responsible for enforcement of this program. Representatives from five colleges (Agriculture, Arts and Sciences, Education, Engineering, and Health Sciences) will serve to aid EHS with the details of oversight, and serve as liaisons to all of the colleges.

XII. SPECIFIC PROGRAMS

A. Student Chemical Safety Program

B. Student Biological Safety Program

Environmental Health & Safety Manual

Student Safety

STUDENT CHEMICAL SAFETY

XIII. [INTRODUCTION AND SCOPE](#)

This program will apply to the use of hazardous chemicals by students, or demonstrations which may expose students to chemical hazards, in any instructional course, laboratory, undergraduate research, or other instructional situation that meets as a course listed in the [UW Bulletin](#) in addition to the requirements of the University of Wyoming Student Safety Program. A student who is classified as the UW Chemical Hygiene Plan covers an employee. All chemicals have a certain degree of hazard.

XIV. [INSTRUCTION](#)

A. [Employee Training](#)

1. Employees must have received the minimum training specified by Section VIII of the Chemical Hygiene Program, and including any addition requirements of the department or college, before engaging in any instruction involving the use of hazardous chemicals.
2. Professionals who are employees of some other institution or firm who have documented training under that institution's or firm's Chemical Hygiene Plan or Hazard Communication Program may, by mutual agreement and consent of the instructor in charge of the course, assume the responsibility for the proper use of hazardous chemicals in an exercise.

B. [Student Instruction and Training](#)

1. The following topics will be addressed as a minimum:
 - a. Students should be informed of the UW Chemical Hygiene Program, its general nature, and that it is available to them.
 - b. Students should be taught the physical and health hazards of chemicals used in that particular class; measures they must use to protect themselves; and the location of designated areas for particularly hazardous substances, including "select carcinogens," as specified in UW's Chemical Safety Guidelines.
 - c. Students should be informed that anyone who is delivering instruction to them that involves the use of hazardous chemicals is knowledgeable about the use of those chemicals.
 - d. Students should be made aware of Material Safety Data Sheets

Environmental Health & Safety Manual

Student Safety

(MSDS's): what they are, why they exist, and their availability for each hazardous chemical that they will be using.

- e. Students should be taught the rudiments of labeling requirements and safe handling of any hazardous chemical that they use.
- f. Students should be taught those aspects of hazardous waste disposal that involve them. Each experiment, procedure, or exercise must include written instructions concerning the proper disposal of waste generated.

XV. CONTROL MEASURES

A. Personal Protective Equipment (PPE)

- 1. ANSI Z87 (latest specifications) approved Chemical Splash Goggles must be specified for any experiment or procedure involving a chemical splash hazard, as required by the UW Eye Protection Policy. (Chemical Hygiene Program, pp. 53-55).
- 2. Use of protective gloves, aprons, lab coats are strongly recommended for each course or activity within a course; and, if required, whether it is supplied by the department or represents a student expense.

B. Other Required Safety Devices

All laboratories and work areas where hazardous chemicals are used by students must be equipped with safety showers, eyewash fountains, appropriate fire extinguishers, adequate ventilation, wash sinks, and approved waste disposal facilities available to the students for their use. Students must also be shown the location of the nearest telephone. Such facilities available for employees may also serve students if they are accessible without restriction.

Highly visible signs, temporary or permanent as appropriate, should be posted for student attention to safety devices and to indicate specific hazards. All chemicals used by students must be properly labeled with contents and hazards.

Storage of hazardous chemicals in teaching areas should be minimized. Proper storage facilities must be provided for any necessary storage and students must be instructed in the use of those facilities.

Environmental Health & Safety Manual

Student Safety

STUDENT BIOLOGICAL SAFETY

XVI. [INTRODUCTION AND SCOPE](#)

All university employees, instructors and students who are at risk of exposure to human blood, human blood components, other potentially infectious material, or bio-hazardous agents in any instructional course, laboratory, undergraduate research, or other instructional situation that meets as a course listed in the [University of Wyoming Bulletin](#) must comply with this program in addition to the requirements of the University of Wyoming Student Safety Program. A laboratory bio-safety level criterion is listed below.

Biosafety Levels for Infectious Agents

Level Facilities	Practices	Safety Equipment
1	Standard Microbiological Basic practices.	None: primary containment provided by adherence to standard laboratory practices during open-bench operation.
2	Level 1 practices plus: Basic Laboratory coats; decontamination of all infectious wastes; limited access protective gloves and biohazard warning signs as indicated.	Partial containment equipment used to conduct mechanical manipulative procedures that have high aerosol potential that may increase the risk of exposure to personnel.

Additional information on Biosafety in the Laboratory and Biosafety Levels may be referenced in the following sources.

1. National Research Council: BIOSAFETY IN THE LABORATORY; Prudent Practices for the Handling and Disposal of Infectious Materials. National Academy Press, Washington, D.C., 1989
2. U.S. Department of Health and Human Services (CDC/NIH): Biosafety in Microbiological and Biomedical Laboratories, 2nd Ed. U.S. Government Printing Office, Washington, D.C., 1988

XVII. [INSTRUCTION](#)

A. [Employee Training](#)

1. Employees must have received the minimum training specified by Section VII of the UW Exposure Control Plan, and including any additional requirements of any department/unit, before engaging in any instructional duties involving biological hazards.

Environmental Health & Safety Manual

Student Safety

2. Professionals who are employees of some other institution or firm who have documented training under that institution's Exposure Control Plan may, by mutual agreement and consent of the instructor in charge of the course, assume the responsibility for the proper use of biological hazards.

B. [Student Instruction and Training](#)

1. The following topics will be addressed as a minimum:
 - a. The UW Exposure Control Plan, its general nature, and that it is available to them.
 - b. Anyone delivering instruction to students will be knowledgeable about the use of potentially infectious materials and bio-hazardous agents.
 - c. An explanation of the modes of transmission for bloodborne pathogens.
 - d. An explanation about the appropriate methods: that will prevent or reduce exposure including engineering controls, work practices, and personal protective equipment.
 - e. Discussion of the: type, proper use, removal, decontamination and disposal of personal protective equipment.
 - f. Biohazard labeling.
 - g. Appropriate action if emergencies involving blood or infectious materials occur.
 - h. Procedure to follow if an exposure incident occurs.
 - i. Appropriate hazardous waste disposal techniques. Each experiment, procedure, or exercise must include written instructions concerning the proper disposal of wastes generated.
2. A laboratory manual or handout describing procedures using infectious materials or bio-hazardous agents must indicate the existence of the hazard as part of the written procedure. Any manual or handout lacking this information as an integral written part of the procedure must be supplemented with the necessary information.

Environmental Health & Safety Manual

Student Safety

XVIII. CONTROL MEASURES

A. Required Safety Devices

All laboratories and work areas where hazardous materials are used by students must be equipped with safety showers, eyewash fountains, appropriate fire extinguishers, adequate ventilation, hand wash sinks, and approved waste disposal facilities available to the students. Students must be taught the location of the nearest telephone. Such facilities available for employees may also serve students if they are accessible without restriction. Highly visible signs, temporary or permanent as appropriate, should be posted for student attention to safety devices and to indicate specific hazards.

B. Engineering and Work Practice Controls

Departments/Units should practice Universal Precautions where occupational or instructional exposure exists. Engineering and work practice controls shall be used to eliminate or minimize exposure. Where exposure remains after institution of engineering and work practice controls, personal protective equipment shall also be used. Refer to the UW Exposure Control Plan, Section V., for details on exposure control methods.

C. Personal Protective Equipment (PPE)

The department/unit Exposure Control Plan must state whether any additional PPE is required or recommended for each course or activity within a course, and, if required, whether it is supplied by the department or represents a student expense.

Appropriate PPE and barriers to prevent exposure to biohazard include:

1. Latex gloves
2. Lab coats or aprons
3. Eye protection
4. Face mask

D. Special Controls

Departments/Units with students at risk of exposure because of tasks involving blood and other potentially infectious materials may require or recommend additional precautionary measures. Students must be informed of the special controls and extra fees that will accompany these courses. Examples of special controls include but are not limited to the following:

1. Risk acknowledgment forms
2. Health insurance policy
3. Health screening exams
4. Hepatitis B vaccination

Environmental Health & Safety Manual

Student Safety

APPENDIX A - INCIDENT REPORT FORM

DATE: _____ TAKEN BY: _____

TIME: _____ ASSIGNED TO: _____

NAME: _____

DEPT/DIV/COL: _____

PHONE NO.: _____

INCIDENT LOCATION: _____

CHARACTERIZATION: _____

INCIDENT: _____

WITNESSES: _____

CHEMICAL(s) INVOLVED: _____

MSDS AVAILABLE? _____ GIVEN TO VICTIM? _____

INFECTIOUS AGENT: _____ SOURCE: _____

CORRECTIVE ACTION(s): _____

DATE OF CORRECTIVE ACTION(s): _____

FILE NUMBER: _____

SIGNED BY: _____

RESPONSIBLE PERSON TO CONTACT: _____