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PREFACE

Broward College is committed to providing and maintaining a safe and healthy work and educational environment by creating and following operating practices and procedures that will result in safe working conditions and efficient operations.

The College requires employees to report unsafe conditions and not to perform work related tasks if the task is unsafe. Employees must report all accidents, injuries, and unsafe conditions to their immediate supervisor without fear of retaliation, penalty or other disincentive.

Requests to improve safety will be given the highest priority by the Administration. The Administration will provide the financial resources for any reasonable request for safety. In a like manner, disciplinary procedures will be followed for willful or repeated violations of workplace safety rules. These procedures may include verbal or written reprimands. Violations involving damage, injury or death may ultimately result in termination of employment.

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INTRODUCTION

This Health and Safety Manual provides guidelines for establishing a safe and healthy environment for all persons while on any Broward College campus, center or facility. Provisions of this health and safety program apply to all employees, students, and visitors.

Personal safety is an individual responsibility. The College is committed to providing timely and accurate information, and training to all employees so that they can make intelligent, informed decisions about their own safety. The classroom setting offers both special opportunities and challenges. Safety in the classroom is a collective responsibility shared by the instructor and the student. Although each student must exercise concern and judgment for his/her own personal safety, the College cannot assume that each one is equipped with the necessary knowledge and skills to operate safely in an educational environment. College faculty and staff must provide information and guidance to develop the necessary awareness and skills in the students. Raising the level of safety awareness at Broward College is an ongoing process for all members of the College community.

SECTION I

ADMINISTRATION'S COMMITMENT AND INVOLVEMENT

Broward College Administration will work with all employees to establish and maintain an effective Health and Safety Program. The Director of Safety and Chief Fire Official, and the Collegewide Health, Safety and Security committee address college-wide concerns. College Administrators participate with faculty, staff, and students in ongoing Safety Program activities, such as:

1. Promoting safety awareness and co-worker participation.
2. Providing safety education and training.
3. Communicating campus security procedures.
4. Participating in accident investigation procedures.
5. Reviewing recordkeeping procedures.
6. Reviewing and updating workplace safety rules.

This commitment to and involvement in the protection of the health and safety of employees, students, and visitors reflects the standard of practice at Broward College.

Any deviation from safety requirements authorized in this manual or in other pertinent safety publications will be accomplished only upon written approval by the appropriate member of the President's staff.

A. MINIMUM REQUIREMENTS

This Health and Safety Manual includes minimum safety requirements and functional responsibilities necessary to meet the health and safety standards for Broward College. The items listed below and in the following sections are minimums that shall in no way be construed to limit individual initiative or responsibility. Stated in general terms, these minimum requirements demand:

1. Adhering to and complying with all safety directives unless a variance is granted.
2. Surveying all areas and operations for potentially hazardous elements, operations or functions.
3. Developing and using safe operating procedures for all hazardous operations.
4. Providing necessary training, including initial orientation, on-the-job instruction, and updates on safety precautions, Right-To-Know legislation, laboratory procedures, and security awareness.
5. Assuring proper tools and equipment are used in all operations and that they are maintained in a safe manner.
6. Using proper personal protective equipment and clothing.
7. Inspecting, properly operating, and controlling wheeled equipment, including cars, vans, forklifts, hoists, tractors, golf carts, lawn mowers and other grounds maintenance equipment.
8. Investigating and reporting all accidents, injuries, and property damage. Reporting all job-related injuries under the Worker's Compensation Law.
9. Investigating and reporting loss of Broward College property due to destruction, theft or unexplained disappearance.

B. PRESIDENT

The President has the overall responsibility for implementing and administering the Health and Safety Program for Broward College. He/she is responsible for:

1. Maintaining a college-wide Health, Safety, and Security Committee.
2. Appointing in conjunction with the President of the UFF, an individual to be the Chairperson of the Health, Safety, and Security Committee.
3. Responding to the recommendations of the Health, Safety, and Security Committee.
4. Taking an active role in promoting safety at Broward College.

C. PRESIDENT'S STAFF

Each member of the Presidents' staff is responsible for exercising a firm commitment to the welfare and safety of all Broward College employees, students, and visitors, and to the protection of College property. They are also responsible for implementing the provisions of the Health and Safety Program as it pertains to the operations, people, and property under their jurisdiction. In their efforts to fulfill these responsibilities, members of the President's staff:

1. Serve as members of the Emergency Planning Committee outlined in the Emergency Procedures A6Hx2-7.01.
2. Allocate personnel and financial resources to provide for safe working conditions, safe work practices, and the safe disposal of hazardous waste.
3. Delegate necessary responsibility for safety and security to Deans, Department Heads, District Directors, Supervisors, and employees in a clear and unambiguous manner, and to hold them accountable for those areas to which their responsibility pertains.
4. Exercise final authority for enforcement of safety and security rules and regulations. Enforcement shall include disciplinary actions, up to and including termination, for willful or repeated violations.

D. DIRECTOR OF SAFETY AND CHIEF FIRE OFFICIAL

The Director of Safety and Chief Fire Official is responsible for:

1. Directing and administering the Broward College Health and Safety Program; developing health, safety, and environmental policies, procedures, and practices to enhance the overall health and safety of Broward College employees, students, and visitors; and assisting all campuses and departments in complying with the requirements of the program and all pertinent federal, state, and local regulations.
2. Coordinating with the Health, Safety, and Security committee on the development and review of the Broward College Health & Safety programs in accordance with the guidelines stated in Florida Administrative Code Rule 381-10. As well as incorporating into the Health and Safety Program the current practices and philosophies adopted by the safety profession as most effective in preventing injuries, occupational diseases, vehicular collisions, liabilities, and damage to property, facilities or the environment.
3. Performing regular inspections to monitor regulatory compliance and implementation of the Health and Safety Program; reviewing all inspections made by other agencies; investigating safety hazards reported by employees and students; reviewing all accident reports and investigations; recommending corrective or preventive measures where deficiencies exist; and making follow-up investigations where required to ensure that unsafe conditions or practices have been properly identified and corrected.

4. Collecting and analyzing safety/health statistics, including accident/injury experience and related costs, problem areas and overall safety performance, and the status of matters affecting the Health and Safety Program and regulatory compliance including known deficiencies; provide an annual summary of accidents to the President's staff and the Health, Safety, and Security Committee.
5. Providing technical guidance and direction to all levels of administrative personnel in the implementation of the Health and Safety Program and in maintaining compliance with related safety and environmental regulations; consulting with all departments on the design, selection and use of materials, equipment, facilities, and procedures; and developing and providing health/safety training programs.
6. Annually revising and updating the Campus Safety Brochure in accordance with the Crime Awareness Act.
7. Participating in the efforts of College, community and professional groups striving to promote health, safety, and accident prevention.

E. CAMPUS PRESIDENTS

Each Campus President has full responsibility and authority for maintaining safe and healthy conditions on his/her respective campus. An unrelenting effort will be directed toward controlling injuries, collisions, liabilities, theft, lost property, and waste of material. Each Campus President is responsible for:

1. Reviewing all inspections of campus facilities to detect existing or potential accident and health hazards, and implement corrective or preventive measures when needed.
2. Working closely with the District Director of Safety, Security, and Emergency Preparedness in implementing the College Health and Safety Program.

F. DEANS, DEPARTMENT HEADS, DISTRICT DIRECTORS, DIRECTORS, AND SUPERVISORS

Deans, Department Heads, District Directors, Directors, and Supervisors oversee compliance with the provisions of the Health and Safety Program within their departments through the reporting of injuries, collisions, liabilities, and property theft or loss incurred by employees under their supervision. They are responsible for ensuring that:

1. Each new employee is provided with a personal copy of the Health and Safety Manual for review and future reference. The manual is also available online through the Human Resources Workplace page, and at www.broward.edu/safety.
2. All hazardous tasks are covered by specific safe operating procedures to minimize injury and property damage/loss.
3. All employees are briefed on safety policies and procedures as they apply to each area.
4. All employees are instructed in the use and need for personal protective equipment for specific hazardous functions.
5. All employees are trained (and retrained, when deemed necessary) in the accepted methods of performing hazardous functions.
6. Necessary safety equipment and protective devices for each function are available for proper use.
7. Safety and security suggestions from employees are encouraged and reviewed.
8. Corrective action is taken whenever hazards are recognized or unsafe acts are observed.
9. The Director of Safety and Chief Fire Official is consulted when assistance is needed in implementing the Health and Safety Program and notified prior to the start of any new hazardous operation.
10. All injuries are reported to Campus Safety; injured persons are advised about possible medical evaluation; and the required accident reports completed.

11. All required safety and Right-To-Know training within their area of responsibility is performed and documented.
12. Tools, equipment, fire extinguishers, and appropriate signage are inspected at frequent intervals for safety and to ensure all personal protective devices are in place and functioning properly.

G. FACULTY

Throughout this document, a classroom will be defined as any space where any faculty or staff member supervises one or more students performing academic or other College related activities. This definition includes, but is not limited to, classrooms, offices, laboratories, clinical areas, athletic areas, Student Life areas, and College vehicles. In the classroom setting, faculty is responsible for ensuring that:

1. Required emergency information, such as evacuation routes and emergency phone numbers, proximity of fire extinguishers, and fire alarm stations are explained to each class.
2. Required exits are operable and unblocked, and all aisles are kept clear.
3. Required personal protective equipment or clothing is available, and students are correctly using it at all times.
4. Specific rules or safety procedures are clearly defined and followed by the students.
5. Safety information is clearly and precisely communicated to the students.
6. Unsafe conditions or safety hazards are reported to the Dean or immediate supervisor, and any condition posing an imminent hazard is reported immediately to Campus Safety.
7. They remain current with regards to health and safety procedures.
8. They comply with the College Health and Safety Program.

H. STUDENTS

Intentional or repeated disregard of safety requirements in the classroom or laboratory may be sufficient reason to expel a student from the College. In the classroom setting, students are responsible for:

1. Following all written or verbal safety instructions.
2. Performing procedures or operating equipment only after understanding the required instructions.
3. Refraining from damaging, destroying or removing any warning or safety device, or interfering in any way with another student's use of them.
4. Wearing required personal protective equipment and clothing when working in hazardous operation areas.

I. ALL EMPLOYEES

In order to help prevent injuries to themselves, fellow workers, students or visitors, all College employees are responsible for:

1. Adhering to all safety rules, regulations, and procedures appropriate to their job responsibilities, all Broward College policies and procedures related to Health and Safety, and the specific rules cited in Section VII of this manual.
2. Asking questions about how to properly and safely perform their job duties, and immediately notifying their supervisor if they are prevented from carrying out any safety procedures.
3. Reporting all unsafe conditions, acts or equipment to their supervisor.
4. Keeping work areas free of safety hazards at all times.
5. Following prescribed procedures during an emergency.
6. Reporting all accidents or injuries immediately to their supervisors.

7. Lifting and handling materials safely.
8. Avoiding engaging in any unsafe activities or distracting other employees.
9. Reviewing all health and safety policies/procedures and campus safety brochures/pamphlets annually for changes.
10. Operating only machines and equipment they have been authorized to operate by their supervisor.
11. Dressing safely and sensibly, and wearing required personal protective equipment and clothing when working in hazardous operation areas.
12. Participating in health and safety training opportunities provided by the College.

SECTION II

HEALTH, SAFETY, AND SECURITY COMMITTEE

A. PURPOSE

The Health, Safety, and Security Committee recommends improvements regarding the health and safety conditions of the total College environment in accordance with the College's policy as stated in the Health and Safety Manual.

One way to accomplish this purpose will be by identifying, evaluating, making recommendations on, and monitoring those recommendations on any health and safety concerns. Since such concerns may be of a sensitive nature, the committee will support the philosophy that the reporting of such concerns can be done without fear of retaliation, penalty or disincentive in accordance with the Whistleblower's Act (Section 112.3187, Florida Statutes).

Although this is a Collegewide Committee, it shall not replace any campus/site Health, Safety, and Security Committee. Members of these committees, particularly their Chairs, shall be welcome visitors to the College-wide meetings and encouraged to share their meeting minutes with the Collegewide Committee.

B. COMMITTEE COMPOSITION

Generally, the District Director of Safety, Security, and Emergency Preparedness and the Chair of last year's Committee shall be automatic members.

The remaining members shall be appointed by the President of Broward College and the Broward College Chapter of the United Faculty of Florida (UFF) in accordance with the Collective Bargaining Agreement, Article 7.30.

Although the membership will change from year to year, it is desirable to have some percentage, 25% for example, of members reappointed to the next calendar year's Committee for continuity.

Specifically, the Committee composition shall include members from the following:

Willis Holcombe Center, North Campus, A. Hugh Adams Central Campus, Judson A. Samuels South Campus, and the Institute of Public Safety; representing faculty, staff, administrators, and students.

Ex-Officio Members can include those deemed appropriate by the President of Broward College and the UFF.

- The Chair shall be a Faculty member agreed to by the President of Broward College and the UFF.
- The Committee shall have a majority of faculty and the majority of the faculty shall be UFF members. It is recommended that some of the faculty members be from a science discipline.
- Staff shall be represented by at least Campus Safety, Physical Plant, and a laboratory manager in science.
- If possible, one of the administrators shall be a science department head.
- Student members assigned to the committee should be active in Student Government.

C. MEETING SCHEDULE

The Committee shall meet monthly or bi-monthly, as decided by the committee chair and members. They will meet from September to at least April. The second Thursday of the month has been the traditional meeting day. However, the Chair can change this day to encourage attendance. The specifics on sites, dates, times, etc. shall be the Chair's responsibility. The meeting sites should be rotated among the three Campuses and the WHC not only to encourage attendance but also as a convenience for on-site inspections of concerns and/or improvements. Visitors, interested parties, and invitees shall be allowed attendance at any meeting.

D. REPORTING STRUCTURE

The Committee shall report to the VP for Operations. Copies of meeting notices, agendas, recommendations, minutes, etc. shall be sent to the President of Broward College, the President of the UFF, and Ex-Officio members. Copies of written communication can also be sent to appropriate College personnel impacted by the committee's work.

E. AGENDA

Agenda preparation will be the responsibility of the Chair (or Vice-Chair if necessary). Input from the VP for Operations and the District Director of Safety, Security, and Emergency Preparedness can be sought to assist the Chair in preparing a productive agenda. The Chair shall attempt to have the agenda available to members at least one week before a scheduled meeting.

Agenda items may include, but are not limited to:

- Reviewing of any College policy or procedure related to health and safety. Assisting the District Director of Safety, Security, and Emergency Preparedness in the preparation and implementation of any health and safety documents required by any regulating body or agency.
- Identifying and promoting College programs to increase awareness of the practices, procedures, and regulations affecting the health and safety environment.
- Reviewing accident, injury, security, and crime reports/statistics from the District Director of Safety, Security, and Emergency Preparedness.
- Reviewing reports of health and safety audits, inspections, testing, etc. and safety training programs.
- Evaluating safety and health concerns brought to or solicited by the Committee or committee members.

- Recommending corrective action regarding any of the above items. Since health and safety concerns in the work environment cover such a broad spectrum, the Committee shall decide when outside assistance is necessary if in-house expertise is insufficient for the evaluation/recommendation process to be effective.
- Touring areas of concern as an aid in the evaluation/recommendation process.
- Monitoring corrective recommendations to encourage their prompt implementation.

SECTION III

HEALTH & SAFETY TRAINING

A. SAFETY ORIENTATION

Safety orientation in the workplace begins on the first day of initial employment or job reassignment. As part of new employee orientation by the Human Resources Department, employees will receive training on the Florida Right-To-Know Law (Florida Statutes Chapter 442). New employees whose responsibilities may result in occupational exposure to Bloodborne Pathogens will receive appropriate training and personal protective equipment from their immediate supervisor.

B. JOB-SPECIFIC TRAINING

When training their employees, Department Heads, District Directors, Directors, and Supervisors are responsible for:

1. Reviewing with each employee the specific safety rules, policies, and applicable procedures that are described in Section VII of this document.
2. Giving verbal instructions and specific directions on how to perform the work safely.
3. Answering employee's questions to ensure knowledge and understanding of rules, policies, and job-specific procedures described in this document.
4. Providing a demonstration of job tasks using known safe work practices.
5. Observing employees performing the work previously demonstrated and, if necessary, providing remedial instruction to correct training deficiencies prior to releasing the employee to perform unsupervised work.
6. Giving employees safe operating instructions and training prior to the use and operation of new equipment or processes.

7. Reviewing safe work practices with employees before permitting new, non-routine or specialized procedures to be performed.
8. Informing all employees that compliance with the workplace Health and Safety Rules described in this document is required as a condition of employment.

C. PERIODIC RETRAINING

Department Heads, District Directors, Directors, and Supervisors are responsible for ensuring that all employees participate in ongoing safety training as required for their specific job responsibilities and for the documentation (employee signature and date) of safety training activities for review by the Director of Safety and Chief Fire Official. Scheduled safety activities may include:

1. Progressively reviewing and discussing one section of this document or one part of the safety rules with employees each month.
2. Discussion of on-the-job accidents including possible ways of preventing future accidents.
3. Emergency Response training, including general instructions and review of first responder and Emergency Procedures 6ahx2-7.01.
4. Reviewing changes and updates to this document.

D. TRAINING METHODOLOGY

The Director of Safety and Chief Fire Official will assist Department Heads, District Directors, Directors, and Supervisors in exploring a variety of training methods and media, such as packaged training programs, conferences, workshops, printed materials, videotapes, on-the-job instruction, self-paced computer based instruction, discussion groups, case studies, and formal lectures.

SECTION IV

FIRST AID PROCEDURES

A. MINOR INJURIES

1. Contact Campus Safety and inform your supervisor of the injury.
2. First aid kits are available from Campus Safety and numerous departments have them available for self-treatment of minor injuries. If the injury is minor, self-treatment is okay, but if in doubt, always seek professional medical treatment. Medical treatment will be administered at approved local medical facilities as directed by Human Resources.
3. Assist Campus Safety in filling out the College Incident/Accident Report form and the Workers Compensation/Injury form. The College as well as the Florida Department of Labor and the Florida Community College Risk Consortium require these forms.

B. EMERGENCY MEDICAL TREATMENT/ SEVERE INJURIES

The emergency telephone number is 9-911 when using a College telephone or 911 when using an outside line or a pay telephone. If you sustain a severe injury or develop a condition that requires immediate medical attention, take the following actions:

1. Call 9-911 or ask a co-worker to call for you if you are unable to do so.
2. Notify Campus Safety or have a co-worker call Campus Safety for you.
3. Notify your supervisor of the incident as soon as possible.
4. Within 24 hours of the incident, assist Campus Safety by filling out the necessary report forms as stated above, or have your supervisor or designated person do so if you are unable to.

NOTE: If you assist with an injury to another employee, student or visitor, make sure you practice Universal Precautions, **see Bloodborne Pathogens, Section VII** of this document to correct training deficiencies prior to releasing the employee to perform unsupervised work.

C. GENERAL RESPONSIBILITIES

Any employee in the immediate proximity of the emergency must:

1. Contact a Campus Safety Officer and provide the following information:
 - a. The caller's name
 - b. Location and nature of the emergency
 - c. The number of persons involved

NOTE: If the employee deems the medical emergency to be life threatening, 911 should be called prior to notifying Campus Safety.

2. Give emergency first aid only if absolutely necessary (i.e., severe bleeding, cessation of breathing, or shock) and only if properly trained in First Response First-Aid procedures, CPR/AED and Bloodborne Pathogens.

D. AED'S (AUTOMATIC EXTERNAL DEFIBULATORS)

1. AED'S are located throughout the College, especially in high traffic areas or areas of higher risk.
2. Campus Safety also has a mobile AED that is available for medical emergencies.

SECTION V

ACCIDENT REPORTS AND INVESTIGATION

A. PROCEDURES - EMPLOYEES

Employees are required to report all work related injuries to their supervisor as soon as possible no matter how minor, even if no medical treatment is required. All accidents/injuries must also be reported to Campus Safety. Campus Safety will then complete the correct paperwork (Broward College Larceny/Theft, Incident or Workers Compensation/Injury Report) and have the claimant complete the Florida Community College Risk Management Consortium Accident/Incident Report and the Workers Compensation Notice of Injury Form as required. All reports will be distributed to the appropriate departments, the Risk Management office, and the Human Resources Department.

Investigation of the accident/injury will be conducted by Campus Safety in conjunction with the area supervisor, not to place blame, but to find out the facts to prevent a future recurrence.

All work-related accidents and injuries of employees that result in medical treatment or lost time must be reported to the Human Resources Department within 24 hours.

Employee accidents or injuries resulting in medical treatment must also contact the Human Resources Department for medical authorization. (In cases where the injury is severe or life threatening, 911 should be called immediately for assistance.)

Employee's accidents/injuries resulting in serious injury or death must be reported by Campus Safety immediately to Human Resources, Risk Management, the Campus President, the District Director of Safety, Security, and Emergency Preparedness, and the Director of Safety and Chief Fire Official.

B. PROCEDURES - STUDENTS

In all cases where a student or visitor sustains an injury or has an accident, Campus Safety must be notified. Campus Safety will complete the necessary paperwork for forwarding to the College Risk Management Department who will conduct the required investigation. (If the injury is severe or life threatening, 911 should be called immediately.)

SECTION VI

RECORDKEEPING PROCEDURES

The Risk Management office is responsible for the maintenance and review of all Accident/Incident Investigation reports and the Campus Facilities Managers are to maintain the Employee Safety Training records.

The Department of Human Resources maintains Workers Compensation Notice of Injury reports and the log and summary of occupational injuries and illness. These records must be maintained for a minimum of three years, or longer if required by statute.

SECTION VII

SAFETY RULES

A. GENERAL SAFETY RULES

- Wear personal protective equipment, such as hard hats, safety shoes, back supports, and safety glasses or face shields as required for the task, and as directed by your supervisor.
- Never stand up in, sit on the side of, or ride on any external part of a moving vehicle.
- Do not enter or exit any vehicle while it is moving.
- Do not work or drive while under the influence of alcohol or drugs.
- Walk (do not run); watch your step; maintain firm footing and proper balance at all times.
- Do not engage in horseplay or practical jokes.
- Do not use frayed, cut or cracked electrical cords. Turn them in to your supervisor for repair or replacement.
- Use only ladders and step stools to get additional height. Do not use a box, crate or other improvised stand to get additional height.
- Do not use gasoline or other flammable liquids for cleaning purposes.
- When working above ground, place warning signs below work area and rope off the area.
- Do not walk or run in front of or behind moving equipment.
- Remove vehicles, equipment, and tools from service when damaged and unsafe to use or operate.
- Do not use corridors, attics, vestibules, halls, stairs or the space under them for storage purposes.
- Do not operate machines unless safety guards are in place and operational.
- Keep doorways and stairways free of obstructions.

B. LIFTING

- If you have any doubt about your ability to lift an object, get help.
- Place your feet close to the base of the object to be lifted.
- Make certain that your hands are dry and clean.
- Get a firm grip on the object.
- Position your feet 6" to 12" apart on an area of secure footing.
- Bend at the knees.
- Keep your back straight.
- Lift slowly and evenly with your leg muscles, and not your back muscles.
- When lifting, keep the object as close to your body as possible.
- Set the object down in the same manner as you picked it up.
- If you must change direction while lifting, pivot with your feet and turn your entire body, avoid twisting your upper torso.
- Wear a back support when necessary and as required.

C. SLIPS, TRIPS, AND FALLS

- Immediately clean up spills of water, oil, and other liquids on the floor by using a mop, bucket, oil dry material, sand, paper towels or cloth material. Post "WET FLOOR" or "SLIPPERY WHEN WET" caution signs/cones to warn of potentially slippery areas. Dispose of all hazardous materials using proper disposal procedures.
- Turn on the lights before entering a dark room.
- Pick up all foreign objects from floor surfaces, aisles or stairs to prevent tripping or falling.
- If chair pads do not lie flat on the floor, call Physical Plant for removal/replacement.
- Immediately report torn, ripped or loose carpeting to Physical Plant.

- Walk around, rather than through, wet or oily areas if possible.
- Take short steps, walk slowly, and use hand rails when you have to walk on slippery surfaces.
- Keep cabinet, and desk drawers and doors closed when not in use or unattended.
- Walk; don't run up and down stairs or steps. Take only one step at a time.
- Avoid blocking your view by carrying/ pushing objects so large that you cannot see where you are going.
- Do not jump from truck beds, platforms, scaffolds or other elevated places.
- While seated, do not tilt chairs back on two legs.
- Do not run electrical and other cords across doorways, aisles or landings.
- When walking on campus be careful to avoid stepping on loose impediments on walkways and avoid wet grassy areas if possible.

D. CLASSROOM AND OFFICE SAFETY

- Position office furniture close to outlets to eliminate tripping over telephone or electrical cords.
- Open doors slowly and keep in either a fully open or fully closed position.
- Use a staple remover, not your fingernails, for removing staples.
- When refilling a stapler, point the loading end away from yourself.
- Do not slide the edge of a sheet of paper in your hand.
- Use a sponge and water moistener for sealing envelopes.
- Do not place your fingers in or near the feed of a paper shredder. Verify guards are in place and working prior to use.
- Lock down the slicing arm on paper cutting devices when not in use. Do not use paper-cutting devices unless finger guards are in place.

(1) Copy machines, typewriters, and fax machines

- Do not place office machines in unstable locations where they are in danger of falling.
- Do not touch electrical machines and connectors with wet hands or while standing on damp floors.
- Turn off and unplug office machines before any adjusting, cleaning or lubricating.
- Keep lids on copy machines closed.
- Never use carbon tetrachloride for typewriter cleaning.
- If office machinery or equipment is not working properly, do not attempt to repair it yourself. Call the appropriate vendor for service.

(2) Desks and tables

- Use only shatterproof glass tops with beveled edges.
- Do not mount pencil sharpeners so that they protrude beyond the edges of desks or tables.
- Check desks and tables for splinters, dangerous cracks, and loose legs. All damaged property should be removed until properly repaired.

(3) Swivel chairs

- Do not stand on or horseplay in swivel chairs.
- Do not raise the seat on swivel chairs beyond the point where your feet can touch the floor.

(4) Fans

- Do not use fans with bent blades, excessive vibration, frayed cords or without guards.
- Do not place floor fans in walkways, aisles, and doorways where they will present a possible trip hazard.

(5) Waste containers

- Do not place objects with sharp points or fragmented edges in waste cans.
- Never place your hands or feet inside waste cans before checking for sharp objects.
- Do not use cardboard boxes as waste receptacles.
- Do not put oil rags, broken glass or sharp objects in wastebaskets. Place them in designated containers (labeled “ Oil Rags,” “Bio-Hazard,” “Broken Glass,” etc.) for special handling by the custodial staff.
- Do not place hazardous waste materials in wastebaskets, but always dispose of them in accordance with Hazardous Waste Disposal Guidelines.

(6) File cabinets

- Close desk and filing cabinet drawers slowly to prevent injuries to your fingers.
- Do not leave file drawers open. Always use the handles to close them.
- Do not stack file cabinets on top of one another, unless properly secured.
- Put heavy materials in the bottom drawers, and lighter materials in top drawers to prevent tipping.
- Pull only one drawer out at a time.
- Check file cabinets periodically for safety hazards; remove burrs and file or cover sharp edges.
- Never place materials, boxes, other files, etc. on top of cabinets above five feet.

E. LAB SAFETY

The College Chemical Hygiene Plan shall be the standard for all lab safety procedures, and shall be reviewed and evaluated for effectiveness at least annually and updated as necessary.

F. MAINTENANCE AND REPAIR FUNCTIONS

(1) Hand tools

- Keep cutting edges sharp and carry tools in a sheath or holster made for that purpose.
- Report worn or damaged tools promptly to your supervisor for repair or replacement.
- Keep tool handles free from splinters and burrs. Handles should be tight on the tool head and not weakened by cracks or splits.
- Do not use impact tools, such as hammers, chisels, punches or steel stakes, etc. that have burred heads. Dress heads to remove burrs or chipped edges.
- When handing a tool to another person, direct sharp points and cutting edges away from both you and the other person.
- Use only insulated tools when working around energized electrical circuits or equipment.
- When using a knife, pliers, or other cutting tools, avoid directing the blades toward yourself. Cut away from your body and stand clear of others.
- Never carry hand tools in your pockets.

(2) Files/rasps

- Never use a file as a pry bar.
- When using a file or rasp, grasp the handle in one hand and the toe in the other.

(3) Hammers

- Do not use a hammer with a cracked, broken, splintered or loose handle. Replace loose or damaged wooden handles and discard hammers with damaged metal or fiberglass handles.
- Do not use a hammer when your hands are oily, greasy or wet; keep hammer handles clean and dry.
- Use the claw for pulling nails. Do not use it as a pry, or wedge or for pulling spikes.

- Never use a hammer with a hardened face on tempered, machined or hardened surfaces. Rawhide, plastic, rubber, lead, brass or copper hammers will prevent damage to parts and also eliminate the danger of flying chips or metal.

(4) Knives

- Do not place the hand or fingers over the back of a knife blade while it is in use.
- Do not try to catch a falling knife. Move out of its path, allow it to fall, and then pick it up.
- Always cut away from the body.
- Keep knives sharp.
- Replace knives with worn handles. Use knives with retractable blades when available.

(5) Pliers

- Never cut through live wires; turn off the power first.
- Use insulated pliers for electrical work.
- In order to prevent the loose ends from flying and causing possible eye injury when using diagonal cutting pliers; place the free hand over the ends of the cotter pin, safety wire or whatever is being cut.

(6) Screwdrivers

- Select the correct size and type of screwdriver to fit the job.
- Avoid using a screwdriver as a chisel or as a substitute for a punch bar or pry bar (exceptions are the dry point and the impact screwdriver).
- Do not put your fingers near the blade when tightening a screw.
- For electrical work, use only screwdrivers that have insulated handles of nonflammable material.
- Do not use screwdrivers to tighten/loosen screws on handheld objects.

(7) Wrenches

- Do not use a makeshift wrench.
- Do not use a wrench if the jaws are cracked or worn.
- Always use box or socket wrenches on hexagon nuts, bolts as a first choice, and open end wrenches as a second choice.
- When using an adjustable wrench, always place it on the nut so that the pulling force is applied to the stationary jaw side of the handle.
- Never use a piece of pipe, tubing or another wrench to extend the handle of the wrench in order to secure additional leverage.
- Do not use a wrench when your hands are oily, greasy or wet; keep the wrench handle clean and dry.

(8) Machines/power tools

- Always wear personal protective equipment, such as goggles or hearing protection, as required for the job.
- Operate a machine only after you have received thorough instructions and have been advised by your supervisor that you are qualified to operate that piece of machinery.
- When working around machinery, do not wear loose clothing, torn sleeves, ties, key chains, rings, watches or any item that could become entangled in the machinery.
- Use a hair net, rubber band, cap, clamp or other mechanism approved by your supervisor to contain long hair when working around machinery such as, drills, grinders and power saws.
- Always make all adjustments to machinery with the power off.
- Inspect all portable power tools, including power cables, extension cords and adapters, before operating them. Do not use any equipment that is damaged or defective.
- Use “ground fault circuit interrupter” (GFI) protected circuits to operate all portable power tools.

(9) Drills

- Adjust the table or depth stop to avoid drilling into the table.
- Securely lock the drill bit or cutting tool into the chuck.
- Always wear eye protection when using power drills.
- Always keep a finger on the portable drill switch so that power may be shut off instantly.
- Do not use a distorted, warped or bent drill bit.
- Disconnect the extension cord before attempting to loosen a chuck on portable drills.
- Discontinue using a drill that overheats.
- Always secure the workpiece before drilling.

(10) Grinders

- Adjust the tool rest to within 1/8" of the abrasive wheel and thoroughly tighten it in place so it cannot shift position while in use.
- Adjust the movable tongue guard to within 1/4" of the abrasive wheel.
- Inspect the wheels for chips, cracks, or grooves on the face or side before turning on the grinder. Do not use wheels if any of these problems exist.
- Dress grinding wheels on the face only.
- When grinding, use the face of the wheel only.
- If the grinding wheel vibrates, do not use it; tag it out of service, and report it to your supervisor.
- Do not touch the ground portion of the workpiece until you are sure the workpiece has cooled.
- When finished using the grinder, shut off the power and do not leave until the wheel has come to a complete stop and the work area is clean.
- Do not operate grinders near flammables or where gasoline fumes are present.

(11) Power Saws

- When operating scroll saws, stop the machine before removing scrap pieces from the table.
- Always keep hands and fingers clear of saw blades.
- Turn off the machine if the material is to be backed out of an uncompleted cut, jammed cut or when adjustments are required.
- Shut off the power, and clean the saw and work area before leaving.
- Do not operate any power saw, unless you have been trained by your supervisor or other qualified trainer in the proper operation of the equipment.
- Do not operate saws unless safety guards are in place and operational before use.
- Clamp your work when using a hole saw or cutting tools larger than 1/2" diameter.
- On band saws, adjust the upper blade guard about 1/8" above the material being cut.
- On band saws, make adjustments for taunt blade tension and centered blade tracking.
- Use push sticks when operating power table saws and always hold the workpiece firmly against the table.

(12) Gasoline engine-powered tools

- Always disengage the clutch before starting; never start under a load.
- Always shut off the engine, wait for the engine to stop and disconnect the spark plug wire before making adjustments or clearing jammed objects.
- Never operate the machine without the guards installed.
- Always wear the personal protective clothing and equipment provided by your supervisor.
- Never refuel running engines or smoke while refueling the machine.

(13) Jacks

- All lever and ratchet jacks, screw jacks and hydraulic jacks must have a device that stops them from jacking up too high. Also, the manufacturer's load limit must be permanently marked in a prominent place on the jack and should not be exceeded.
- A jack should never be used to support a lifted load. After the load has been lifted, place jack stands under the load-bearing member.
- Proper maintenance of jacks is essential for safety. All jacks must be inspected before each use and lubricated regularly.
- Remove handles from jacks when not in operation.

(14) Welding

- Do not attempt to perform any welding until you have been trained and certified by your supervisor or other certified trainer.
- Obey all warning and precaution signs that are posted in designating welding areas.
- When arc welding and arc cutting, use helmets or handshields with filter lenses, and cover plates to view the arc.
- When operating resistance welding or brazing equipment, use face shields or goggles.
- Wear protective flame-resistant gloves when welding or cutting.
- Open windows and doors, and turn on local exhaust fans to reduce air contaminants.
- Use all personal protective equipment provided by your supervisor.
- Do not transfer gases from one cylinder to another or mix gases in a cylinder.
- Keep all unused cylinders capped and secured with a safety chain.

- Do not use oxygen from a cylinder or a cylinder manifold unless a pressure regulating device intended for use with oxygen is provided.
- Check all cylinders and equipment, such as hoses and regulators for leaks before and after use. Do not use them if they are leaking.
- Use flash guard shields to isolate the welding area.
- When not in use, turn off supply bleed-off cylinders.
- Do not handle cylinders, apparatus and fittings with oily hands, gloves or greasy materials.
- Place oxygen, fuel gas cylinders, and acetylene generators away from the welding position so that they will not be unduly heated by radiation from heated materials, by sparks or slag, or by misdirection of the torch flame.
- Keep one or more approved Class B, C, or ABC fire extinguishers at the location where welding or cutting is being done.

G. VEHICLE/DRIVER SAFETY

- Inspect all vehicles prior to departing. As a minimum, check the following:

ON- ROAD VEHICLES:

1. Brakes
2. Emergency brake
3. Windshield wipers
4. Seat belts
5. Lights (brake, head, tail, and signal)
6. Tires (including spare)
7. Mirrors
8. Instrumentation for proper indication, including back-up warning signal

OFF-ROAD VEHICLES:

1. Per checklist for specific type of vehicle.

- Wear seat belts at all times
- Slow down when crossing rough terrain, when making a turn or when pedestrians are present.
- Keep hands, fingers, head, and feet clear when closing doors, hoods, and trunks.
- Stand clear of all vehicles moving in reverse.
- Do not mount or dismount a moving vehicle.
- Do not jump off of a truck bed or trailer.
- Set the parking brake before leaving the vehicle.
- Do not operate engine-driven construction or agricultural equipment until trained and certified by your supervisor or other certified trainer.

H. WAREHOUSE/MATERIAL SERVICES

- Keep floors clean and aisles unobstructed to allow easy access to exits.
- Use only approved equipment; such as hand trucks, dollies and ladders, to retrieve materials from high shelves.
- Immediately upon receipt, store all hazardous or potentially hazardous products in the area designated by your supervisor.

I. FORKLIFTS

- Do not operate the forklift unless a certified trainer has trained you.
- Move the forklift with the forks elevated just enough to clear the floor.
- When approaching a blind corner with the forklift, sound the horn, reduce speed, and proceed with caution.
- Do not permit riders on the forklift at any time.
- Use seat belts at all times.
- Turn the forklift slowly to prevent tipping and over-turning the load.
- Lower the load before moving the forklift.

- Do not run over rubber hoses or welding cables with lift trucks.
- Do not lift a load that exceeds the rated capacity of the forklift.
- If at any time a powered industrial truck is found to be in need of repair, deemed defective or is in anyway unsafe, it will be taken out of service until repaired.
- Do not turn the forklift on any hill, ramp or incline.
- When ascending or decreasing grades in excess of 10%, loaded trucks shall be driven with the load upgrade.

J. HEAVY EQUIPMENT SAFETY

(1) Mobile lifts/cranes

- Do not lift a load that exceeds the rated capacity of the operating boom angle.
- Use standard operating signals (coordinated in advance) to direct all operations.
- Permit one person to give signals to the operator unless the load is being transferred to a point which is out of sight of the signalman. In such cases, a second signalman should be designated.
- Use outriggers on rubber-tired cranes or lifts, as directed by your supervisor.
- Use mats when cranes or lifts are operated on soft ground.

(2) Bulldozers and tractors

- Check the condition of brakes, clutches, steering mechanisms, and hydraulic and electrical systems before operating. If a defect is found, do not use the piece of equipment, but tag "Out of Service " and report it to your supervisor.
- Do not operate any piece of equipment unless you have been properly trained.

- When coupling a tractor to other equipment, coworkers must be clear of the space between the units. Stop the machine, place it in neutral, and set the brakes before anyone is allowed to couple the equipment.
- When leaving the machine, shut off the power, remove the key, set the brakes, land the blade, and place the shift lever in neutral.

K. VIDEO DISPLAY TERMINALS (VDT) WORKSTATION LAYOUT

Many employees use computers. Some employees use computers the entire day, others part of the day, and some use them occasionally. Whatever the frequency of use may be, there are some basic health and safety procedures to help prevent injuries. No matter how comfortable your workstation is, sitting still for long periods of time can be tiring and stressful.

- Stretch occasionally and look away from the your work frequently.
- If possible, get up from the terminal and do other tasks.
- Alternate different tasks throughout the workday to vary work rhythms. Take time out to collate papers or deliver completed work. This will keep strain and tension from building up.

L. HOW TO ADJUST YOUR WORKSTATION

Most workstations are not ideal, sometimes simple adjustments can improve them dramatically.

(1) Keyboard height

- The keyboard height should be comfortable, about 2 1/2 inches from the top of the table to the top surface of the spacebar and bottom row of keys. At that height, the desktop can give the needed support to the operator's wrists. If the desk top is the right height, approximately 24 to 28 inches, the upper and lower arms form a comfortable angle of approximately 90 degrees. Upper arms will then hang comfortably at ones sides, taking the strain off the upper-back and shoulders.

- If the keyboard is not adjustable and it is too high for comfort, try using wrist pads to elevate them to a more comfortable position.
- Keyboards are rarely too low, but a low keyboard can be adjusted, by placing a pad or piece of wood under the keyboard.

(2) Screen face angle and screen height

- The face of the screen should be tilted back about 10 to 20 degrees for easier viewing, provided this does not increase the glare on the screen.
- The top of the screen should be no higher than eye level to minimize eye movement.
- For comfortable viewing, the screen should be 18 inches from the eyes.
- If the angle of the screen is not adjustable, and the screen is too vertical, you can place a small wedge under the front of the monitor to tilt it back.

(3) Chair height

Good posture is essential. To prevent neck and back strain, keep the spine and head upright. Sit well back into the chair. The chair is at a comfortable working height when one doesn't feel excessive pressure on the legs from the edge of the seat. Pressure from the seat front could make the legs go to sleep. The backrest should fit comfortably at the small of the back to give good support. Use the following methods to determine the correct chair height:

- Sit with the soles of the shoes flat on the floor. Keep the shins perpendicular to the floor and relax the thigh muscles.
- Measure the distance from the hollow of the knees to the floor.
- Subtract 1 to 3 inches.
- The resulting measurement is the correct height for the top of the chair seat.

(4) Glare

Sometimes glare and poor lighting make it difficult to read the VDT screen. The following are some hints in improving workstation lighting. To control glare:

- Adjust the screen's brightness and contrast controls to compensate for reflections on the screen.
- Close the blinds or pull the shades to block daylight coming through a window from behind the terminal.
- Try to eliminate or adjust any intense light source shining directly into the eyes.
- Adjust the angle of the screen to minimize glare.
- One can minimize the strain of reading in a dimly lit room by using a small task light. Make sure the light is positioned so it does not cause glare or reflect on the screen.

NOTE: If you are still having problems with your computer workstation adjustments, contact your campus computer department for assistance.

M. CHEMICAL SAFETY/HANDLING CHEMICALS

- All personnel and students handling or working with acids, caustics, solvents or petroleum products shall follow safe work practices and all safety rules.
- Wear all necessary personal protective equipment, such as goggles, gloves and proper clothing, when working with any hazardous material.
- No food or drinks shall be stored or consumed in areas where potentially toxic substances are stored, mixed or otherwise handled.
- Employees will use due care to avoid spills or splashes when handling chemicals. Spilled chemicals must be cleaned up immediately. Use absorbent materials and proper disposal procedures indicated on the Material Safety Data Sheet when spills occur.

- All containers of chemicals or hazardous substances shall be clearly labeled.
- Clean all tools thoroughly after being used around corrosive chemical.
- When mixing acids and water, always pour the acid into water slowly. Never pour water into acid, as it may splash.
- If contact is made with caustic or corrosive chemicals, take immediate action by flushing the affected area with water. If swallowed, check the chemical warning label on the container or the Material Safety Data Sheet. Always seek proper medical attention as soon as possible.

If caustic or corrosive chemicals enter eyes, flush eyes with water for a minimum of 15 minutes. In the event an eye wash station is not available, use a garden hose or any source of potable water that is immediately available. Always seek proper medical attention as soon as possible.

N. RIGHT-TO-KNOW

(1) Hazardous communications

Per OSHA 29 CFR Part 1910.1200: Hazard Communication requires employers to communicate to employee's information concerning hazardous chemicals in the workplace. Broward College provides information about hazardous material to all employees who use or who could be exposed to such materials. The data includes information on:

- Chemical labeling
- Material Safety Data Sheets
- Personal protective equipment, as necessary
- Employee training on the safe use and handling of hazardous materials.
- Emergency response

(2) Hazards of non-routine tasks

The following are basic safe work practices to utilize when working with hazardous materials.

- Know where the Material Safety Data Sheets (MSDS) are located. Read and use the MSDS on products in your area, so you have a better understanding of safety precautions necessary when handling this product.
- Read warning labels to identify hazardous materials and the hazards associated with them.
- Read all labels carefully to determine the recommended safety precautions.
- Wear all required personal protective equipment when working with hazardous materials.
- Know how to fit, clean, and store your personal protective equipment.
- Use established engineering methods to control exposures as instructed. Follow all safe work practices when using or handling hazardous materials. If in doubt, always ask your supervisor for assistance.

O. RADIATION

OSHA 29 CFR Part 1910.96 requires the employer to:

- Be responsible for proper controls to prevent any employee from being exposed to radiation, either ionizing or electromagnetic, in excess of acceptable limits.
- Have each radiation area be conspicuously posted with appropriate signs or barriers. Maintain all records of the radiation exposure of all employees for whom a personnel monitoring is required.

P. BLOODBORNE PATHOGENS STANDARD

OSHA 29 CFR Part 1910.1030, Bloodborne Pathogens Standard, requires employers to determine who has occupational exposure and to establish methods to reduce workplace exposure to bloodborne diseases.

The standard requires the employer to develop an Exposure Control Plan. The information in the Exposure Control Plan will ensure limited occupational exposure to blood and other potentially infectious materials.

This standard applies to all Broward College employees who in the scope of their employment may be potentially exposed to:

- Blood
- Blood products
- Bodily fluids
- Infectious materials

Q. LOCK-OUT/TAG-OUT

OSHA 29 CFR Part 1910.147, the Control of Hazardous Energy (Lock-Out/Tag-Out) Standard, covers the servicing and maintenance of machines and equipment in which the unexpected energization, or start-up of the machines or equipment could cause injury to employees. According to OSHA, an energy source is any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal or other energy.

The Lock-Out/Tag-Out rule requires the employer to establish an energy control program that includes:

- Documented energy control procedures.
- An employee training program.
- Periodic inspections of the procedures.

This standard requires employers to establish an Energy Control Procedures Program and utilize procedures for affixing appropriate lock-out devices or tag-out devices.

An employee having the need to secure an energy source shall:

- Conduct periodic inspections. These inspections shall be conducted by the employee and an authorized employee, other than the one utilizing the energy control procedures.
- Utilize tags legible and understandable by all authorized employees.
- Utilize lock-out devices substantial enough to prevent accidental removal and the use of excessive force or unusual techniques, such as the use of bolt cutters or other metal cutting tools.
- Utilize lock-out and tag-out devices that indicate the identity of the employee applying the device.
- Utilize specific procedures during shift or personnel changes to ensure the continuity of lock-out or tag-out protection.
- Before lock-out/tag-out devices are removed and energy is restored to machine or equipment, employees shall ensure the following:
 - The work area shall be inspected to ensure non-essential items have been removed and to ensure machines or equipment components are operationally intact.
 - The work area shall be checked to ensure all employees have been safely positioned or removed.
 - Each lock-out/tag-out device shall be removed from each energy-isolating device by the employee who applied the device.
 - Blocking the flow of energy from the power source and placing a tag or lock to prevent others from turning the power on is one way to prevent accidental start up of electrical equipment.

R. HANDLING OF COMPRESSED GAS CYLINDERS

- Compressed Gas cylinders must not be stored in direct sunlight or any hot place.
- Employees must not use a cylinder of compressed gas without reducing the pressure through a regulator attached to the cylin-

- Oil and grease will not be used as a lubricant on valves and attachments of oxygen cylinders. Keep oxygen cylinders and fittings away from oil and grease, and do not handle such cylinders or apparatus with oily hands, gloves or clothing.
- Cylinders of oxygen, when stored indoors, shall be kept in areas separate from other flammable gasses.
- Cylinders must be kept in racks or stands, or set in an upright position and chained to prevent their being knocked over.
- The valve protection cap must be kept in place whenever cylinders are not in use.
- Do not stand in front of gauges when opening the discharge valve.
- Handling of cylinders by cranes or other equipment must be done only when the proper racks are used; rope or wire slings are prohibited.
- It is prohibited to use cylinders as rollers or supports.
- Remove regulators and place caps over valves when transporting cylinders.
- Cylinders must never be treated roughly and inspected for leaks frequently.

S. BATTERY CHARGING AND/OR STORAGE

- Battery charging must be done in a well-ventilated area.
- Batteries shall be stored in a covered, secured area.
- Facilities for flushing and neutralizing spilled electrolyte must be readily available.
- Suitable facilities for quick drenching or flushing of eyes and body shall be provided within the work area for immediate emergency use.
- NO SMOKING signs must be posted in battery charging areas.
- Tools and other metallic objects must be kept away from the tops of uncovered batteries.

T. POWER ACTUATED TOOLS

- Powered Actuated Tools (P.A.T.) operate like a loaded gun and should be treated with the same respect and precautions. They must only be operated by specially trained employees.
- P.A.T.'s must be stored in their own locked container when not in use.
- Always inspect equipment prior to each use.
- Always wear proper personal protective equipment.
- The tool should not be loaded unless it is to be used immediately. A loaded tool should not be left unattended. NEVER point a P.A.T. at anyone, as accidental discharge is always possible.
- Fasteners must not be driven into very hard or brittle materials that might chip or splatter.

U. COMPRESSORS, COMPRESSED AIR, AND PNEUMATIC TOOLS

- Always wear the proper personal protective equipment.
- Compressors must be equipped with pressure relief valves and pressure gauges.
- Air intakes should be located so that clean air enters the compressor.
- It is prohibited to direct compressed air towards another person.
- Compressed air used for cleaning purposes must be reduced to 30 psi.
- Signs must be posted warning of the automatic starting features of the air compressor.
- Pneumatic tools should be used at the manufacturers listed pressure.
- Compressed air shall not be used to blow dust out of hair or to clean clothes while being worn.

V. LADDER SAFETY

The primary safety hazard involved with using a ladder is falling. A poorly designed or improperly used ladder may collapse under the load placed upon it and cause the user to fall.

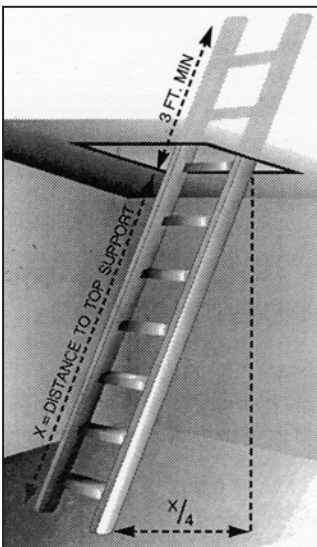
(1) Various types of ladders

- Fixed ladders - a ladder permanently attached to a structure, building or equipment.
- Step ladders - a self supporting portable ladder, non adjustable in length, having flat steps and hinged back.
- Single ladder - a non self-supporting portable ladder, non-adjustable in length, consisting of one section. Its size is designated by overall length of the side rail.
- Extension ladder - a non self-supporting portable ladder adjustable in length.

(2) Ladder safety rules

- Never exceed the rated weight limits of the ladder.
- All ladders should be checked before using to make certain that rungs and side rails are in sound condition; the rungs should be free of grease and oil.
- All wood parts should be free from sharp edges and splinters.
- Ladders with broken or missing steps, rungs, or cleats, as well as broken side rails or other faulty equipment must not be used.
- Ladders that have developed defects must be withdrawn from service for repair or destruction. They must be tagged or marked "Dangerous - Do Not Use."
- Portable straight ladders should be firmly placed on secure footing. If there is a danger of slipping, the ladder should be held by a fellow worker or lashed in place.
- Step spacing should be uniform and no more than 12 inches apart.
- Both hands should always be kept on the ladder while ascending or descending.

- The worker should always face the ladder when climbing up or down.
- When on a ladder, exercise caution and do not over-reach.
- When necessary to place ladders in front of a blind doorway, the door should be locked or guarded by a fellow employee.
- Barrels, boxes, chairs or crates shall not be used in place of ladders.
- Ladders must not be placed on boxes, barrels, or other unstable bases to obtain additional height.
- Short ladders must not be spliced together to provide longer sections.
- Ladders should not be used for any other purpose than what they were intended.
- Stepladders must be fully extended and in sound condition before using.
- Ladders must be equipped with a metal spreader or locking device to hold the front and back sections in a open position.
- The top step of a stepladder should not be used as a step.
- Extension ladders longer than 60 feet must not be used.



- Metal ladders must never be used near electrical equipment.
- Ladders used to gain access to a roof or other area must be extended at least 3 feet above the top point of support.
- The foot of a ladder, where possible, shall be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is one-quarter of the working length of the ladder (the length along the ladder between the foot and the support). **See figure on the left.**

W. STAIRS

- Always use hand rails.
- Packages or other materials, when carried on stairways, should be held so that vision is not obscured.
- When using stairways, take one step at a time. Stair rails or wall rails should be used when ascending or descending stairs.
- Do not stop or talk on stairways. Use landings.
- All stairways, catwalks, gangways and open work areas above the ground or floor shall be provided with substantial guard-rails.

X. SCAFFOLDING

- All scaffolds shall be equipped with life lines which shall be worn by all personnel working on such structures.
- Do not sit, lean, or rest on or against any railing or lifeline.
- A safe means must be provided to gain access to the working platform level through the use of a ladder, ramp, etc.
- Tools and equipment must not be left unsecured in any elevated position.
- The footing or anchorage for scaffolds must be sound, rigid, and capable of carrying the maximum intended load without settling or displacement.
- Unstable objects such as barrels, boxes, loose brick or concrete blocks, must not be used to support scaffolds or planks.
- Scaffold planks should extend over the end support not less than 6 inches and no more than 18 inches.
- Scaffold planking should be overlapped a minimum of 12 inches or secured to prevent any possible movement.
- Guardrails, midrails, and toeboards must be installed on all open sides and ends of platforms more than 10 feet above the floor.

- There should be a screen with a 1/2 inch maximum opening between toeboards and guardrails where persons are required to work or pass under the scaffold.
- Scaffolds must be maintained in a safe condition and must not be altered or moved horizontally while they are in use or occupied.
- Built-up scaffolds shall be erected by qualified personnel and inspected at appropriate periods to insure the structure is safe.
- Employees must not work on scaffolds during storms or high winds.

Y. OUTDOOR EQUIPMENT

(1) Landscape/grounds

When working with any landscape/grounds equipment, the following procedures should be observed:

- Read the manufacturers manual for each piece of equipment.
- Follow the recommended operating procedures at all times.
- Check and inspect machinery for defects or broken parts.
- Use proper fueling method.
- Inspect equipment for all proper safety features, never override any safety devices.
- Dress for safety; wear all necessary Personnel Protective Equipment.

The following Personnel Protective Equipment is recommended, when working with landscape/grounds equipment.

- Eye protection, safety glasses or goggles
- Hearing protection
- Safety shoes
- Close fitting clothing; not loose or baggy
- Work gloves
- Hard hat and full face shields (chain saws)
- Cut resistant chaps (chain saws)

(2) Fueling & refueling procedures

The following procedures will be observed when fueling/ refueling:

- DO NOT SMOKE!
- Always fill on a level surface.
- Do not fill while engine is running or hot.
- Do not overfill the tank; wipe up all spills.
- Remove any dirt and debris from the surface of the equipment to prevent debris from entering fuel tank.
- Keep fuel in an appropriately labeled safety can.
- Mix two-cycle fuels in the safety can, not the fuel tank.

(3) Weed cutter

- Check shield for cracks.
- Use the correct shield for the blade in use; plastic/nylon line, use plastic shield, metal blades, use metal shields.
- Utilize the proper length of nylon cord.
- Make sure lock handle is in place.
- Throttle must operate freely.
- Know where debris goes; curved shaft models throw debris in a clockwise direction, straight shaft models throw debris in a counter clockwise direction.
- Use the safety harness as it distributes the weight of the machine.
- Avoid hazards; be aware of pedestrians, wire fences or other hidden objects.
- Store safely; always let machinery cool before storage.

(4) Blowers

- Check fan guard.
- Make sure there are no bystanders in the way.
- Never point the blower at anyone.

(5) Hedge trimmers/tree trimmers

- Start tool on a firm, level surface; do not start in mid-air (drop start).
- Do not override safety features or switches; do not tape switches to “on.”
- Do not modify equipment.
- Do not overreach when using the trimmer.
- To clear debris from the blades, always turn off the machine.
- Do not remove muffler cover; if worn, replace it.
- Watch for power lines when putting up ladders and when using any tree trimming equipment.

(6) Chain saws

- Plan the work, ensure that there is an obstacle-free work area and, in the case of falling, an escape from the falling tree.
- Remove all obstacles from the path of the saw.
- Secure a good, firm footing.
- Grip the handle firmly; the thumb and fingers should encircle the handle.
- Chain saws should always be started up on the ground.
- Never operate a chain saw that is damaged, improperly adjusted or not completely and securely assembled.
- When cutting, avoid reaching above shoulder height.
- Never adjust the guide bar or saw chain when the engine is operating.
- Never carry a chainsaw with its engine running or idling. Cut the engine, and carry the chain saw with the guide bar pointing to the rear and with the muffler away from the body.
- Be sure that the saw chain stops moving when the throttle control trigger is released.
- Before servicing, fueling or transporting, always switch off the engine.

(7) Riding mower

Before riding:

- Check the machine for defects.
- Check that for all safety devices are operational.
- Make sure the instruction decals are in good condition, easily read, and understandable.
- Make sure the deflector chute or back chute is clear.
- Make sure all guards are in place.
- Make sure the parking brake is in good operational order.
- Check and clear the area; the area should be free of students, staff and debris. All debris must be cleared prior to starting.
- Do not override seat safety switches.
- Use blade disengagement lever when not in a mowing situation.
- When cutting on a slope, go up and down the slope to avoid tipping over.
- Passengers are not allowed on the mower at any time.
- Employees are forbidden from operating a riding mower while wearing a headset, headphone, using a cell phone or other listening devices other than a hearing aid.

When dislodging anything caught in the blade or chute:

- Turn off the engine.
- Take the key with you.
- Disengage spark plug wire.
- Then, remove debris.

(8) Pesticide and fertilizer application/spraying

- Follow labeled instructions and Material Safety Data Sheets (MSDS) when applying weed killers, fertilizers, pesticides or herbicides.
- Inspect equipment for leaks and loose nuts and bolts.
- Wear personal protective equipment (goggles, gloves, respirator, tyvek suit, and rubber boots) provided by your supervisor.
- Never transfer pesticides or fertilizers into an unmarked or unlabeled container. Always keep containers tightly closed.
- Do not store pesticides near sources of heat.
- Do not transport pesticide containers in the cab of a vehicle.
- Do not smoke or carry smoking materials while handling or spraying pesticides or fertilizers.
- Do not mix fertilizers with gasoline or cleaning agents.
- Wash hands and arms thoroughly before eating, smoking or drinking.
- Store pesticides on non-porous surfaces, such as metal or plastic shelves.
- After the completion of applying pesticides or herbicides immediately remove clothing saturated or impregnated with pesticides and dispose of them in a metal container labeled "Pesticide Clothing." Do not take these clothes home.
- Wash hands and any area exposed to any chemicals thoroughly with soap and water.

SECTION VIII

PERSONAL PROTECTIVE EQUIPMENT

It is the responsibility of each employee to use Personal Protection Equipment.

A. EYE SAFETY

It is important to keep flying objects, dust, rust, vapors, heat, and liquid splashes out of the eyes. OSHA 29 CFR Part 1910.151 states safety glasses, goggles or face shields are required whenever there is danger of exposing the eyes to flying particles, caustic substances or harmful light rays. Eye and face protection must be used wherever there is a probability of something entering the eye, such as: chemicals, hazardous gases or liquids, dust or flying debris from power tools and grinding equipment. All eye protection must meet ANSI Z87.1 regulations. Welders are required to use the proper shaded lenses for the type of work they are performing (see welding eye safety).

In areas that are designated for eye protection, everyone must wear eye and face protection, including employees performing the job, those working nearby, and visitors.

Safety glasses, goggles or face shields must meet the following requirements:

- Provide adequate protection against particular hazards for which they are designated.
- Be reasonably comfortable when worn under the designated conditions.
- Fit snugly without interfering with the movement of the wearer.
- Be durable and in good repair.
- Be capable of being disinfected and easily cleaned.

If you wear prescription eyeglasses to correct your vision, you must wear glasses with safety lenses that meet ANSI requirements. Safety glasses/spectacles require special frames. Combinations of normal street wear frames with safety lenses are not in compliance.

Safety goggles/glasses worn over regular glasses must be comfortable and not disturb the adjustment of corrective lenses. All employees should check their safety glasses before each wearing, as follows:

- The brow protector should fit against the face. This helps protect against particles entering the eye from above the glasses.
- The glasses should fit snugly, not tightly, without eyelashes hitting the lenses.
- If there is a headband, it should fit snugly. Headbands that are slack should be replaced.
- Lenses should be clean. Clean with water or with special cleaning solution for eyeglasses.
- Lenses should be free of scratches, cracks or pitting.
- The brow and side protectors should be in good condition.
- Glasses used by different employees should be disinfected before being used by another employee.

Contact lenses are not a substitute for safety glasses. Contact lenses pose a special threat. Hazardous dust, gases, vapors or liquids can get trapped between lenses and eyes.

Contact lenses:

- Must not be worn in hazardous atmospheric conditions.
- Must not be worn under respirators.

According to OSHA 1910.151, where a person's eyes or body may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

(1) Welding eye safety

Workers and other persons adjacent to the welding areas must be protected from the rays by non-combustible flameproof screens or shields, OR they must wear appropriate welding safety goggles.

- Helmets or hand shields must be used during all welding or cutting operations.

- Helpers or attendants must be provided with the proper eye protection.
- All filter lenses and plates must meet ANSI Z87.1 standards for transmission of radiant energy.

B. HEAD PROTECTION

According to OSHA 29 CFR, Part 1910.132, head protection equipment (hardhats) shall be worn where there is a possible danger of head injuries from overhead impact or falling objects. Hardhats must meet ANSI Z89.1 safety requirements for Industrial Head Protection Standard.

Hardhats must be worn in designated hardhat areas.

- Wear your hardhat on your head.
- The shell and the suspension of the hardhat should be checked daily to see if they're in good condition.
- Do not carry anything in your hardhat; do not use it as a bucket or step stool.
- Do not paint the shell. Solvents in the paint may soften the shell material.

C. HAND SAFETY

Appropriate hand protection will be required where employees are exposed to harmful chemicals or abrasive materials that have the potential for hand injuries. Gloves of an appropriate type shall be worn when handling rough, sharp, and/or hot materials, as well as chemically active substances.

There are three types of hand injuries:

- Traumatic injury following an accident.
- Contact with substances that damage the skin.
- Repetitive motion problems caused by overuse of specific muscle groups in the hands.

(1) Types of gloves

- Rubber, vinyl or neoprene gloves are for use with caustic chemicals such as acids, cleansers and petroleum products.
- Leather gloves protect against sparks, rough surfaces, and scraping objects.
- Metal mesh gloves protect hands from knives, blades or other sharp instruments.
- Plastic-film gloves protect against injury from mild substances.
- Cloth gloves provide traction for holding slippery objects, insulate to protect against moderate heat or cold, and protect hands from sharp edges.
- Aluminized fabric or other special materials protect hands against the intense heat of molten material.
- Insulated gloves are often made of rubber, and worn underneath leather gloves as protection against electrical shock and burns.

(2) Other hand protection

- Hand pads protect against rough materials when fine finger movement is not needed.
- Barrier creams protect against corrosive substances and can make cleanup easier, but are not substitutes for gloves.
- Forearm cuffs made of cloth or special fabrics protect against heat and keep sleeves out of the way.
- Wash hand frequently.
- Keep hands away from face when working with chemicals.
- Don't use hands for feeding materials into saws or other machinery.
- Don't use hands to sweep up metal, wood chips or shavings.
- Rotate tasks to give hands a rest, where possible.

D. FOOT PROTECTION

Safety shoes must be worn where they are required according to OSHA 29 CFR 1910.132 (a). Safety shoes must meet ANSI-Z41.1 standard. The College will supply safety shoes to all employees requiring them for their job.

- Steel-toed shoes must be worn if employees work with heavy objects or machinery that could cause foot injury.
- Safety shoes with sole protection may be required in certain jobs.
- Electricians should wear electrical hazard safety footwear.
- If the job does not require safety shoes, select sturdy work shoes that will give sufficient support.
- Inspect shoes regularly for damage, including dampness or embedded metal that might impair electrical protection, cuts, cracks, etc. which might expose feet to danger.
- Never wear defective footwear on the job.
- Employees should not repair their own safety shoes, i.e., never repair non-sparking footwear with metal nails.

E. CLOTHING

Employees will wear appropriate clothing for the type of work they are performing. The College will supply work shirts and any specific safety clothing needed by employees.

- Check for tears, leaks, punctures or signs of wear and tear before putting on safety clothing.
- Be sure the clothing is not contaminated from previous usage.
- Contaminated clothing should be decontaminated or discarded as soon as possible.
- When operating machinery or working with machinery make sure all clothing fits correctly; loose fitting clothing can contribute to accidents.
- Beware of heat sickness. Clothing that keeps water and vapors out usually also keeps them in; avoid dehydration.

F. HEARING PROTECTION

According to OSHA 29 CFR 1910.95, protection against the effects of occupational noise exposure shall be provided when the sound levels exceed those of the health and safety standards.

- Hearing protection must be worn in all designated areas.
- Any type of approved hearing protection should have a noise reduction rating (NRR) expressed in decibels. This indicates the amount of noise reduction that the device provides.
- Ear plugs and ear muffs provide important protection against noise.
- Follow manufacturer's instructions for cleaning and storage.
- Proper fit is essential for all effective hearing protection.
- Cotton balls or other non-approved substances should not be used for hearing protection.
- Employees are not permitted to operate machinery while using personal listening devices; i.e. walkman, iPods, etc.

There are three Basic Types of Hearing Protection:

1. Earplugs
 - a. Formable Earplugs: disposable or semi-disposable
 - b. Pre-molded Earplugs: universal type or multi-size type
 - c. Custom-molded Earplugs
2. Canal Caps - made of a soft, rubber-like substance
3. Earmuffs

G. SAFETY BELTS, HARNESSSES, AND LIFELINES

In jobs involving potential fall hazards, safety belts, lifelines or body harnesses must be used.

- Always inspect lifelines and safety harnesses carefully before each use. Check for signs of deterioration such as torn fibers or frayed areas.
- Body harnesses are required for fall arrest systems.
- Body harnesses must always be used when in any type of aerial equipment.

**ALWAYS WEAR THE REQUIRED PROTECTIVE GEAR -
EVEN IF THE JOB WILL "ONLY TAKE A MINUTE." NEVER
TAKE SHORTCUTS!**

SECTION IX

FIRE PREVENTION

One of the most costly and destructive causes for loss of life and property that the College could experience would be from a major fire.

A. REPORTING FIRES

All employees should report fires immediately to 9-911 and follow the procedures outlined in the campus emergency procedure manual.

B. PORTABLE FIRE EXTINGUISHERS

Know the location of the closest fire extinguisher. A fire extinguisher should be used only on a small fire. Use a fire extinguisher only if you have been trained in its proper use.

Most portable fire extinguishers are classified as follows:

- A - for fires involving combustibles like wood or paper.
- B - for flammable liquids like gasoline.
- C - for electrical wiring and equipment.
- ABC - for combination fires.
- K - for kitchen grease fire, or other cleaning agent.

All used fire extinguishers must be replaced or recharged as soon as possible after use.

C. FIXED FIRE SUPPRESSION EQUIPMENT

(1) Automatic sprinklers

Materials must not be piled within eighteen (18) inches of sprinkler heads. There must not be any storage above the sprinkler protection. Do not store materials above the suspended ceiling. Sprinkler heads must be in good condition, with no accumulation of dirt, dust, grease, and paint.

(2) Halon/FM 200 and other clean agent systems

Halon 1301/1211 are gases and usually used to protect sensitive electrical equipment, such as computer and telephone rooms. A typical Halon or other clean agent system is triggered by either ion, smoke or flame detectors, or manual control. Since the detectors are sensitive to the by-products of combustion, the devices register an alarm condition well before ceiling temperatures reach 130 degrees. There is a timing device delay of 20 seconds, to allow personnel to evacuate and seal the room before the gas is discharged. Combustible materials shall not be stored in a Halon/FM 200 or other clean agent protected area.

If work is done in an area that is protected by a Halon/FM 200 or other clean agent system, the employee should know:

- What the fire alarm sounds like.
- Emergency procedures for evacuating and sealing the room.
- The location and how to use the ABORT button to stop the activation of the system, if required.

D. FIRE/SMOKE ALARM SYSTEMS

In the event an alarm rings, employees should:

- Know what the smoke detector sounds like.
- Follow your emergency fire plan.
- Prepare to evacuate, according to your emergency fire plan.

E. FIRE DOORS

- A fire door, and its assemblies, is a special door designed to contain the spread of fire and smoke within a building. Some models of fire doors will operate automatically in case of a fire.
- Do not “prop” open self-closing doors. Keep self-closing fire doors closed, but not locked, at all times.
- Check that nothing blocks or will prevent full closure of a fire door.

F. GENERAL FIRE SAFETY PRACTICES

- Exit doors must be unlocked during normal working hours and free passage to and through these exits must be maintained at all times.
- Exit signs and directional exit signs, where required, must be visible, and properly indicate the direction and location of the exits. Other doors and passageways that could be confused as exits must be properly marked as “NO EXIT.”
- Do not overload electrical outlets. Check that electric wires and plugs are in good condition, no frayed or worn areas. Turn off electrical equipment at the end of the workday.
- With the exception of coffee makers and microwave ovens, the use of cooking and heating equipment should be discouraged.
- Observe “NO SMOKING” requirements.
- Flammable liquids must be stored in Underwriters Laboratories (UL) approved safety cans or UL approved flammable liquid cabinets.
- When transferring flammable liquids from one container to another, the containers must be bonded and/or grounded.
- NO SMOKING around flammable liquids must be observed at all times.

SECTION X

PROTECTING THE PUBLIC

The public shall be kept away from locations where work activity presents hazards.

Holes, trenches, and obstructions shall be barricaded. When exposed to traffic, holes, trenches, and obstructions shall be marked with warning signs and flags in daylight and electric flashers at night. These should be located as to give the traveling public ample time to stop if necessary.

When leaving material, equipment or other obstruction on a roadway overnight, the following precautions shall be taken:

- Equipment shall not be left adjacent to fire hydrants or directly in front of entrances to public access.
- Equipment shall be locked or otherwise secured so that unauthorized persons cannot start, move or operate them.
- Any obstructions shall be adequately protected by approved warning devices.
- Warning devices and barricades shall be placed to adequately protect the public, employees, and students before excavations or trenches are opened.
- Warning devices shall not be removed until excavations have been back filled and the area made safe.
- Trucks, air compressors, welding machines and other equipment shall be placed so as to present the least hazard to traffic consistent with a safe working space for employees. Trucks and equipment shall be placed between the work area and oncoming traffic.