The following document contains important guidelines and procedures in relation to the groundskeeper assistant position at Valley City State University. The review of these guidelines and procedures is mandatory before beginning employment with the Facilities Services Department. For questions concerning this document, contact your supervisor.
Welcome to the Facilities Services Department!

This handbook was developed to serve as a training manual for your position and as a reference guide for day-to-day questions. This handbook will explain the general tasks and procedures your need to know for this job and answers many commonly asked questions.

Your Job
As a student groundskeeper assistant in this department, your primary role is to support the main groundskeeper staff in maintaining the campus grounds for the VCSU Campus Community through practicing effective and safe groundskeeping methods as directed by your supervisor.

Your Supervisor
The head Groundskeeper directly supervises this position. The Facilities Services Office manager serves a secondary supervisor.

Any questions or complaints you have concerning your job should be directed to your direct supervisor.
Policies

Attire and Personal Conduct
The Facilities Services Department is a casual office. There are, however, a few standards for dress and conduct that you will need to follow.

Your appearance should reflect the fact that you are working in a visible role in a high-traffic professional workplace. Essentially, that means that you should be clean and presentable. Jeans and t-shirts are acceptable attire, just be sure they are not worn out (torn, frayed, holes, etc.). Clothing should not display offensive or obscene images/messages.

You will need to wear proper clothing when operating a mower or weed trimmer. Proper clothing includes: long pants, long sleeve shirt, close toe shoes, work gloves, protective eye glasses, and ear protection.

The same level of professionalism should be applied to your conduct within the department. Remember to speak politely and be as helpful as possible when interacting with the Campus Community. If you feel that someone is being rude to you, please direct that person to a staff member.

Personal Phone Calls
We understand that there may be times when you need to make a personal phone call while at work. If you make such a call while at work, please find a private location and keep the call brief.

Illness
Please do not feel it necessary to come in to work on days that you are not feeling well. We neither expect nor want you to show up on these days. Take the time to recover at home so you do not pass your illness on to your co-workers. You are, however, expected to let us know, either the main office or your direct supervisor, through email or text, before your shift begins that you will not be coming in to work due to illness.

Lateness/Absence
If something unexpected keeps you from arriving to work on time, please notify the office and/or your direct supervisor as soon as possible that you will be late. If you know ahead of time that on a specific day you would like to be late, please discuss this with your direct supervisor.
School Related Lateness/Absence
We understand that there may be certain times of the year when school responsibilities will monopolize your time, making it difficult to make it in to work. If you anticipate situations like these, please discuss with your direct supervisor ahead of time. Remember that school is your top priority and we will work with you on making your hours work with your school obligations.

Timesheets and Paychecks
Your direct supervisor will have copies of the Student Employee Timesheet or it can be found here: http://www.vcsu.edu/employeeservices/vp.htm?p=688. The beginning and ending dates must be correct. You should fill in your name, employment type, and department: Facilities Services. You must show total hours worked rounded off to the nearest quarter hour (.25, .5, .75). Remember to sign your timesheet before turning it in.

Timesheets must be signed and dated by the direct supervisor and student. Timesheets are due in the Facilities Services Office by 11am on the day following the end of a pay period. There will be consequences for falsifying records.

**A time sheet that is not filled out correctly or is not turned in on time will be returned to the direct supervisor and your check could be delayed.
Job Responsibilities

Daily:
Performs general campus clean up; mowing, leaf removal, shrub care, planting beds, shrub/tree pruning, and snow removal.

- Cuts lawns using walk-behind or other power mower.
- Trims and edges around walkways, flowerbeds, walls, etc. using clippers, power weed cutters and other edging tools.
- Prunes shrubs and trees to shape and improve growth or to remove damaged leaves, branches, or twigs using shears, pruners or chain saw.
- Rakes, power blows, or vacuums and removes leaves and other ground debris.
- Cleans grounds, roadways, etc. and removes litter.
- Shovels snow from walks and driveways using plow truck, tractor, blower, shovel, or other powered equipment.
- Spreads a combination of salt and/or sand mixture to prevent ice buildup with truck sander, or other equipment.
- Plants grass, flowers, trees, and shrubs using a variety of gardening tools.
- Waters lawn and shrubs, using hose or by activating fixed or portable sprinkler system.
- May be involved with moving of equipment; refueling grounds vehicles and equipment; assisting in special set ups / take downs for major college events; pick up signs, special event display items, furniture, and banners, plus other duties to serve the needs of the College Community.
- May perform or assist with duties such as furniture or equipment relocation, setting of tables, chairs, etc. for special events.
- Other duties may be assigned
VCSU SAFE OPERATING PROCEDURES:
Grounds Maintenance Equipment

Grounds maintenance equipment plays an important role in the upkeep of the campus grounds. By following safe operating procedures for all equipment involved, it can help reduce the risk of a work related injury.

Procedure

Please remember to report all incidents or damage of state property to the Safety Office within 24 hours of the incident!

For all Grounds Maintenance Equipment, remember the following information:

- **Operation and Maintenance**
  - Prior to use, inspect the entire unit for worn, loose or damaged parts.
  - Do not use the unit unless it is in proper working condition.
  - Keep the handles dry and free of oil and dirt.
  - Never start or run the engine inside a closed room or building.
  - Stop the engine while repairing, refueling, inspecting and transporting.
  - Only use dealer authorized accessories and attachments.
  - Drain the fuel tank for long term storage.
  - When unit is stored or left unattended, disconnect the spark plug.
  - Clean outer surface after use.
  - Store in designated area.
  - Do not alter equipment from the manufacturers intended use.

- **General Safety:**
  - Student Employee operation will be at the discretion of the supervisor based on the knowledge and experience of the individual.
  - Keep pets and children away from the work area.
  - Do not operate the equipment if you are fatigued, ill or under the influence of drugs, alcohol or medications.
  - Eliminate all sources of spark, open flames, or work that could cause spark in the areas where fuel is mixed, poured or stored. **DO NOT SMOKE!**

- **Fueling**
  - Mix, pour and store fuel in an approved, marked container.
  - Store fuel in a well-ventilated area.
  - Select bare ground for refueling (concrete recommended).
  - Wipe up all spills before starting the engine.
  - Before starting the engine, move at least 10 feet away from the fueling site.

*Edge Trimmer*

- Supervisors will identify authorized operators and supply training.
- Personal Protective Equipment (PPE) is MANDATORY and includes the following:
  - Boots or safety shoes
  - Hearing protection
  - Long pants
  - Safety goggles
  - Gloves
- **Operation and Maintenance**
  - Make sure the blade guard is properly attached and in place.
  - Be aware of burn hazards (do not touch the muffler tail pipe during or immediately after use.
  - When leaving an area where there is a slope, ensure the unit is resting on its handlebars to prevent it from moving.

**Grass/Brush Trimmer**

- Supervisors will identify authorized operators and supply training.
- Person Protective Equipment (PPE) is MANDATORY and includes the following:
  - Boots or safety shoes
  - Hearing protection
  - Long pants
  - Safety goggles
  - Gloves
- **Operation and Maintenance**
  - Do not transfer the trimmer to another person while the machine is running.
  - Prior to staring the job, clear the area of objects that may be thrown.
  - Start trimmer and use on flat, level ground.
  - Hold trimmer firmly with both hands during operation.
  - Walk behind trimmer; trim from left to right in a sweeping motion.
  - Do not reach to make a cut.
  - Stop engine before removing debris from the cutting head.
  - Do not use trimmer without the proper guard/shield.
  - Do not edge with the metal blade.
  - To avoid kick-out, use the proper blade for the job.

**Hedge Clipper**

- Supervisors will identify authorized operators and supply training.
- Person Protective Equipment (PPE) is MANDATORY and includes the following:
  - Boots or safety shoes
  - Hearing protection
  - Long pants
  - Safety goggles
  - Gloves
- **Operation and Maintenance**
  - Do not transfer clipper to another person while the machine is running.
  - Safety shield and handle must be in good condition and fastened in place.
  - Blades must be aligned and move freely.
  - Maintain stable footing.
  - Work slowly, plan your moves.
  - Move clipper in a sweeping motion away from your body.
  - Do not over extend to make a cut.
  - If blade jams, stop the engine before removing the obstruction.
  - Use gloves when handling the blades.
  - Do not touch blades to the ground, this may cause debris to be thrown, as well as cause damage to the blades.
  - Prior to work, clear the area of any objects that may be thrown.
  - Clean the outer surface of hedge clipper after each use.

**Rotary Tiller**

- Supervisors will identify authorized operators and supply training.
- Person Protective Equipment (PPE) is MANDATORY and includes the following:
  - Boots or safety shoes
- Hearing protection
- Long pants
- Safety goggles
- Gloves

**Operation and Maintenance**
- Do not transfer machine to another person while the engine is running.
- Guards and shields must be in place.
- Start the engine and tines only when you are ready to start tilling.
- Disengage clutch before starting the engine.
- Give complete and undivided attention to the task at hand.
- Keep hands, feet and clothing clear of the power driven parts.
- Stop the engine whenever you leave the tiller unattended.
- Stop rotary tiller engine in an emergency.
- Disengage tine rotation and stop engine before cleaning, removing debris or making adjustments.

**Walking Mowers**

- Supervisors will identify authorized operators and supply training.
- Person Protective Equipment (PPE) is MANDATORY and includes the following:
  - Boots or safety shoes
  - Hearing protection
  - Long pants
  - Safety goggles
  - Gloves
- Inspection
  - Ensure cooling fans are clear of grass and debris.
  - Grass catcher must be in good condition, in place and working properly.
- Protection
  - Prior to mowing, clear the area of all objects that may be thrown.
  - Discharge clippings away from people.
  - Do not lift or block grass catcher door open when the blade is engaged.
- Operation and Maintenance
  - Do not use mower for anything other than the manufacturer’s intent.
  - Mow across slopes and use caution when changing directions.
  - Release handles lever to stop the engine and blade during shutdown and emergency situations.
  - If an object is hit, stop mower and fix the damage before continuing.
  - Never leave mower unattended when the engine is running.
  - Stay away from the mower deck and discharge chute when the blade is turning.
  - Stop mower blade:
    - When moving between jobs.
    - Before crossing gravel, road, path or sidewalk.
    - Before opening grass catcher door.

**Riding Mowers**

- Supervisors will identify authorized operators and supply training.
- Person Protective Equipment (PPE) is MANDATORY and includes the following:
  - Boots or safety shoes
  - Hearing protection
  - Long pants
  - Safety goggles
  - Gloves
- Inspection
  - **Engine must be shut off when inspecting the equipment!**
o Inspect hydraulic line connectors and hoses for leaks before applying pressure to the system. DO NOT USE HANDS TO CHECK FOR LEAKS.

- Operation
  o Maximum seating capacity is one person.
  o Before mowing, clear the area of all objects that may be thrown.
  o Discharge clippings away from people.
  o Keep all shields and safety devices in place. Grass deflectors must be installed in the lowest position on side discharge units.
  o Before staring the machine:
    ▪ Engage the parking brake.
    ▪ Ensure the traction pedal is released, transmission is neutral and PTO is off.
    ▪ After the engine has started, release the parking brake and take foot off traction pedal.
    ▪ Machine must not move- if it does, an adjustment must be made to the neutral return mechanism.
  o Keep hands, feet and clothing away from the mower deck while the blade is turning.
  o Disengage PTO when:
    ▪ Moving between jobs.
    ▪ Before crossing gravel, road, path or sidewalk.
    ▪ Making adjustments.
  o Wear gloves when servicing the blade.
  o Be careful when changing directions on a slope.
  o If you hit an object, stop the mower and fix damage before continuing the job.
  o Slow down and be aware of surroundings at all times.
  o To shut down the machine:
    ▪ Release the traction pedal and place the transmission into neutral.
    ▪ Set the parking brake and disengage the PTO.
    ▪ Lower the cutting unit of attached implements to the ground.
    ▪ Wait for all movement to stop before getting off the machine.
VCSU SAFE OPERATING PROCEDURES:
Lawn Safety

VCSU provides general safe operating procedures for grounds keeping on campus. The procedures are provided to reduce the risk of a work related injury or death.

Gardening tools and mechanical lawn care devices, such as lawn mowers, power blowers, and chain saws, present special safety concerns

Common Landscaping Accidents:

- Cuts, lacerations, or amputations from whirling mower blades.
- Bruises or broken bones from flying projectiles.
- Burns from hot equipment parts.
- Electrical shock from faulty grounding or defective electrical cords.
- Eye injuries
- Back strain from improper equipment usage.
- Slips, trips, and falls.

Regardless of the type of landscape equipment you use, follow these basic guidelines to ensure optimum safety:

- Read the equipment owner's manual.
- Supervisor will train all student and part-time employees the proper equipment operation, safety, and environmental hazards.
- Use the right equipment for the job at hand.
- Inspect the equipment before each use.
- Know how to control and stop the equipment quickly.
- You shall wear personal protection equipment (PPE), as necessary and required including, but not limited to:
  - Eye and Hearing protection (goggles, hard hat, other face protection)
  - Long pants, sturdy shoes and work gloves.
  - Sunscreen to exposed areas of skin.
- Avoid fatigue and heat stress.
- Drink plenty of water and take breaks.
- Do not operate powered equipment if you are tired, sick, or taking medication.
- Take special precautions when working with electrical equipment. If you are using an extension cord, take care not to accidentally cut it.
- Do not smoke around gas-powered equipment (there is no smoking allowed on University property). Allow hot equipment to cool before refueling.
- Make sure that all guards are in place and in good condition.
- **ABSOLUTELY NO HORSEPLAY IS ALLOWED!!**
- Maintain equipment and keep in good repair.
- Lock-out/Tag-out equipment while out of service and in need of repair.
- While filling portable fuel cans, remove from the vehicle and place cans on ground surface.
- **Keep pedestrians and bystanders at least 30 feet away when using powered equipment. Be aware of your surroundings at all times.**

**Hand Tools**

- Keep hand tools in good condition. Replace split or rotten handles. Keep blades sharp.
- Use tools that fit your needs and your build. For example, if you are tall, choose tools with handles that are long enough to prevent you from stooping over your work.
• Never leave a rake, shovel, or hoe on the ground facing up. Foot injuries and/or head injuries can occur from handles that pop up unexpectedly.

**Mower Safety** *(see ‘VCSU SAFE OPERATING PROCEDURES: Grounds Maintenance Equipment’ for more information)*

• To avoid injury with power mower equipment, you must pay close attention to your surroundings.
• Conduct a pre-mowing inspection of the lawn and remove any debris, rocks, limbs, or other items that could become a projectile. Look for concealed hazards such as holes.
• Keep hands and feet away from moving blades.
• Fill the tank with gas before beginning work. (By filling the tank initially, you can avoid having to fill the tank later when it is hot.)
• Shut off the engine before unclogging, servicing, or adjusting the mower and before removing the grass bag.

**Riding Mowers**
• Before starting the engine, make sure the transmission is out of gear and the mower blade clutch is disengaged.
• Never allow extra riders on the lawn mower.
• Slow down when turning and when working on slopes. Mow up and down slopes rather than across them.
• Always look behind you before backing.
• If you hit a large rock or stump, stop the mower and inspect the blades and shaft. Replace damaged blades before continuing work.
• Never leave a running lawn mower unattended. Before leaving the seat, park the mower on a flat area, disengage the mower blades, and remove the ignition key.

**Walking Mowers**
• Wear sturdy shoes with good traction. Never wear sandals around walk-behind mowers.
• Do not bypass the safety device that stops the blade when the operator releases his/her grip on the handle.
• Mow across slopes rather than up and down slopes.
• Work slowly and patiently when mowing tall grass or tough weeds. Forcing the mower may cause repeated clogs and engine stalls.
• Never leave a running mower unattended. If you stop momentarily, cut the throttle to idle and make sure the mower will not roll away.

**Chain Saw Safety** *(see ‘VCSU SAFE OPERATING PROCEDURES: Grounds Maintenance Equipment’ for more information)*

Chain saws are ideal for trimming trees and cutting fallen limbs into smaller pieces. Unfortunately, chain saws are associated with many serious injuries each year. **Student employees are NOT allowed to operate chainsaws.** Follow these guidelines when operating a chain saw:

• To avoid injury, you must respect chain saw hazards and handle chain saws skillfully
• Must go through training and have documentation before using a chain saw.
• Stay alert while sawing. Most injuries occur below the waist when the operator is not paying attention.
• Do not use a chain saw alone. Have someone else stand nearby in case of an emergency.
• Choose and inspect your chainsaw carefully
• Use the correct size chain saw for the job at hand.
• Ensure that the chain is sharp and the tension is taut.
• Ensure that smaller chain saws have a safety tip to prevent kickbacks. (Kickbacks cause one third of all chain saw injuries.)
• Wear a hard hat to protect you from falling limbs.
• Wear leg chaps, gloves and eye protection.
• Always operate a chain saw with two hands.
• Limbs that are at shoulder height or higher present a special safety problem. Use a ladder so the saw is at a lower and safer position relative to your body.
• Never allow the tip of a running chain saw to touch the ground. This could cause a serious kickback injury.
• To avoid kickback injuries, stand to the side of a running chain saw. Do not stand directly behind it.
• Move brush and limbs as you work to maintain a clear operating area.
• Never force a chain saw through a limb.
• Never stand on a log or limb while cutting it.

Power Blowers

• Wear safety goggles.
• Always walk towards your work when using a power leaf blower. Do not back away from your work.
• Be aware of pedestrians or others in the area.

Trimming Equipment

• Wear safety goggles.
• Avoid touching rocks, debris, and gravel with trimming equipment. These items could cause a serious injury if a kickback occurs.
• Make sure all screws and chains are tight. Vibrating equipment can cause screws to loosen.
• Walk towards your work. Do not back away from your work when using a trimmer.
• If using electric trimmers, keep extension cords clear of blades.
Improper lifting techniques of any size object could result in a serious injury. By learning safe lifting techniques, it can reduce the risk of injury.

Guidelines for Lifting/Carrying
When lifting heavy objects, follow these guidelines to ensure your safety:

- Test the load for stability and weight. If the object is too bulky or weighs 50 pounds or more, get help, use a cart or mechanical lift.
- Know the approximate weight of the load and be sure your equipment is rated to lift that size of load. Do not exceed the manufacturer’s recommended safe working load.
- Wear appropriate shoes to avoid slips, trips and falls.
- Face and stand as close as possible to the object with feet wide apart and establish good footing.
- Bend at the knees, keeping the back as straight as possible.
- Get a firm, balanced grip on the object and pull it in towards you, keeping the center of gravity of the object close to you.
- Keeping your back as straight as possible, make the lift smoothly and under control as you begin straightening your legs.
- When moving the object, keep the load evenly balanced and proceed with caution through doors and around corners.
- Avoid twisting your body while lifting, moving, or setting down an object.

Removing objects from overhead storage also requires special attention.

- Before bringing an object down from above, test its weight by pushing up on it.
- If the only way you can reach an object is by standing on the tips of your toes and reaching way over your head, do not move the object.
- If the object is too high, use a ladder or other appropriate means to safely reach it.
VCSU SAFE OPERATING PROCEDURES:
Noise/Hearing Protection

There are a number of jobs on campus that require employees to be exposed to extremely loud noises. To prevent work-related hearing loss, there are safe operating procedures to be aware of.

**Personal Hearing Protection**

Engineering controls (any mechanical device, physical barrier, enclosure or other design procedure that reduces the sound level at the source of noise generation or along the path of propagation of the noise to the individual. This **does not include** protective equipment such as ear muffs, plugs, or administrative controls.) are the first line of defense against hazardous noise levels. If the engineering control fails to reduce noise levels, other equipment must be used to prevent the noise exposure.

Personal protective equipment is to be used only temporarily or when engineering controls are not practical. When hearing protection is mandatory, employers should ensure that hearing protection is worn by all affected employees.

Disposable earplugs and earmuffs will be provided for the affected employees.

**Please see ‘VCSU SAFE OPERATING PROCEDURES: Personal Protective Equipment’ for more information.**
VCSU SAFE OPERATING PROCEDURES:
Personal Protective Equipment

Protective equipment (with few exceptions) will be provided by the University. It is expected that this equipment will be used and maintained by the affected employees. Personal Protective Equipment (PPE) may include protection for the face, head, eyes, extremities, protective clothing, respiratory devices, protective shield and barriers.

This equipment is expected to be used wherever it is necessary due to hazardous processes or machinery.

Procedure
All PPE will be of safe design and construction for the task at hand.

Specific supervisors will assess the workplace to determine present hazards and which PPE should be used for the specific job.

Supervisors will provide training to each of the affected employee and who is required to use PPE. Each employee should be trained on the following:

- When PPE is used.
- What PPE is necessary for the job.
- How to properly put on, take off, adjust and wear PPE.
- The limitations of PPE.
- Proper care and maintenance of the PPE.

**Please refer to individual sections of the “Safe Operating Procedures Manual” to know when use of PPE is expected.**
VCSU SAFE OPERATING PROCEDURES:  
Shop Safety

It is not possible to detail all the risks involved with shop work. However, it is possible to foresee many hazards by carefully planning each job. To prevent accidents, utilize your knowledge, training, and common sense. Evaluate potential sources of injury, and attempt to eliminate hazards. Follow these guidelines for general shop safety:

- Be sure you are fully educated on the proper use and operation of any tool before beginning a job.
- Always wear appropriate safety gear and protective clothing.
- Ensure that there is adequate ventilation to prevent over-exposure from vapors, dust, and fumes.
- Maintain good housekeeping standards.
- Keep the work area free from slipping/tripping hazards (oil, cords, debris, etc.).
- All spills must be cleaned immediately.
- Remove sawdust, wood chips, and metal chips regularly.
- Keep tool and equipment guards in place.
- Know where fire extinguishers are located and how to use them.
- Make sure all tools and equipment are properly grounded and that cords are in good condition.
- Double-insulated tools or those with three-wire cords are essential for safety.
- Use extension cords that are large enough for the load and distance.
- Secure all compressed gas cylinders.
- Never use compressed air to clean clothing or skin.
- Always use flashback arrestors on cutting/welding torches.
- Take precautions against heat stroke and heat exhaustion.
- Wear infrared safety goggles when appropriate.
VCSU SAFE OPERATING PROCEDURES:
Weather/Body Stress

The thermal (heat or cold) stress of any given working situation is the combination of all of those factors which result in heat gains or losses relative to the body or which prevent the body's temperature regulating mechanisms from working efficiently.

**Hot Weather**
People may suffer from heat stress during hot, humid conditions. To prevent heat stress, employees should limit strenuous physical activity during the hottest portion of the day, wear a brimmed hat when in the sun, take frequent breaks, and drink plenty of fluids. Heat stress occurs in two forms: heat exhaustion and heat stroke.

**Heat Stress**
Heat stress occurs when excessive heat can place an abnormal stress on your body. The body temperature rises above normal and you can experience the following:

- Muscle cramps
- Weakness and disorientation
- Feeling dangerously ill
- Tiredness, irritability, inattention

You can remedy heat stress by drinking a lot of fluids (it is very important to stay hydrated) and by taking frequent breaks in a cool place.

**Heat Exhaustion**
Heat exhaustion is usually caused by strenuous physical activity and hot, humid conditions. Because heat exhaustion is the body's response to insufficient water and salt, it should be treated as quickly as possible. Signs and symptoms of heat exhaustion include the following:

- Exhaustion and restlessness
- Headache
- Dizziness
- Nausea
- Cold, clammy, moist skin
- Pale face
- Cramps in abdomen and lower limbs
- Fast, shallow breathing
- Rapid, weak pulse
- Falling body temperature
- Fainting

You can remedy heat exhaustion by resting in the shade or a cool place, drink plenty of water and loosen clothing to allow body to cool (you can also use cool wet wags to assist with cooling the body).

**Heat Stroke**
Heat stroke is usually caused by exposure to extreme heat and humidity and/or a feverish illness. Heat stroke occurs when the body can no longer control its temperature by sweating. Heat stroke is extremely dangerous and may be fatal if not treated immediately. The signs and symptoms of heat stroke include the following:

- Hot, dry skin
- Headache
- High temperature
- Strong pulse
- Noisy breathing
- Unconsciousness

Immediately take the following steps to administer first aid for heat stroke:

- **CALL 911!**
- If possible, move the victim to a cool place.
- Remove the victim’s clothing.
- If the victim is conscious, place the victim in a half-sitting position and support the head and shoulders. If unconscious, place the victim on the side with the head facing sideways.
- Fan the victim and sponge the body with cool water.

**Guidelines for Heat Protection**

- **Eye Protection**
  - Wear sunglasses that are designed to block out 95% of UV.

- **Skin Protection**
  - Wear sunscreen!
  - Apply sunscreen 20 minutes before going outside. Reapply sunscreen every 2 hours if you are sweating a lot.
  - Wear clothes that cover your arms, legs, and neck, that are made of lightweight fabrics to ensure full protection. Also, wearing a hat, sunglasses and working in shaded areas (if possible) will provide more protection.

- **Know the sun!**
  - The sun is at its peak from 10am-2pm
    - Beware of the effects the sun has on you.
    - Stay hydrated.
    - Cool-down in air conditioning or near fans.
    - Pace yourself during strenuous activities.

- **Protect yourself from insects!**
  - When the temperature rises, insects become very active.
  - If you are stung by a bee, remove the stingers using a card- do not try to pinch it out- doing this will inject more venom into your system. Yellow jackets, hornets and wasps will sting repeatedly.
  - To help protect yourself against insects, apply insect repellants that contain DEET prior to working outside.

**Cold Stress**

When your body temperature drops even a few degrees below normal (which is about 98.6 degrees Fahrenheit), you can begin to shiver uncontrollably, become weak, drowsy, disorientated, unconscious, even fatally ill. This loss of body heat is known as “cold stress” or hypothermia. It is important that persons who work outdoors or in cold indoor environments (e.g. coal storage bunker, warehouses, etc.) learn about how to protect against serious health conditions.

**Frostbite**

- Body tissue may freeze when skin is exposed to extreme cold or if touched by a very cold object.
  - Nose, ears, cheeks, fingers and toes are at the greatest risk.
- Worst cases can cause permanent tissue damage, loss of movement in affected parts, possible unconsciousness and death from heart failure.
  - Damage may be greater if the body part is thawed, then refrozen.
- Symptoms:
  - Feeling extremely cold, then numb with possible tingly, aching, brief pain.
• White or grayish, yellow glossy skin, which may blister.
• Confusion, failing eyesight and shock as condition progresses.

**First Aid**
• Warm the frozen part immediately with blankets or warm (not hot) water.
• Avoid touching the frozen part; do not rub or hit it.
• Keep the frozen part away from hot stoves, baths, heat lamps and water bottles.
• Do not break blisters.
• Exercise the body part once it is warm, but do not walk on frostbitten feet.

**Hypothermia**
• Exposure to cold may send body temperatures to dangerously low levels. This can occur in above-freezing temperatures if there is high wind, you are exhausted or are wearing wet clothes.
• Worst cases can lead to unconsciousness and death.
• Symptoms:
  o Chills, shivering, numbness and sometimes pain in the extremities.
  o Slurred speech, poor coordination, confusion and drowsiness.
• First Aid
  o Cover the victim with blankets or lie next to them to share body heat.
  o Keep the frozen part away from hot stoves, baths, heat lamps and water bottles.
  o Keep the person awake.
  o Get emergency help immediately if the person loses consciousness.

**Prevention**
• Avoid bathing, smoking or drinking before going out in cold conditions.
• Wear layers of clothing (dry). If possible, wear wool underneath and a waterproof layer on top.
• ALWAYS cover hands, feet, face and head in the cold.
• Change out of wet clothes immediately if you are planning to continue staying out in cold weather.
• Keep moving while working; take regular breaks in warm areas.
  o Move to a warm area when you start to feel very cold or numb.
VCSU SAFE OPERATING PROCEDURES:
Ladder Safety

A ladder is to be provided and used at points of access where there is a break in elevation and where there is not ramp, runway, sloped embankment or personnel hoist provided.

Procedure:
Ladders are for climbing and should only be used for that purpose. They are designed for single-person use. Extension, straight and fixed ladders are to be used for gaining access to different elevations, not used as work platforms. No ladder is intended for use in a horizontal position nor are they to be tied together to achieve a greater length. They are not to be used for levering, bracing or any other purpose which might weaken the structure.

- Ladders should be inspected regularly- all defective ladders (weakened, broken or with missing rungs) should be removed and not used by any personnel. Any damaged ladders should be reported to a supervisor immediately.
- Ladders must be strong enough for the intended use. Verify weight capabilities prior to use.
- Ladders must not be tied or fastened together to create longer sections unless they are specifically designed to do so.
- Ladders in storage must be supported, protected from damage and kept out of high-traffic areas.
- Repairs to ladders must meet the original manufacturer’s specifications.
- Metal ladders are not to be used near electricity.
- Those using a ladder should face the ladder and use both hands when ascending and descending. It is recommended to hold the ladder with one hand while working to keep your body weight centered between the rails. It is also recommended to use a hanger or tool holder for the tools required for the job.
- When erecting a ladder, the base of a straight ladder should be placed at an angle so that the distance between the bottom of the ladder and the supporting structure is ¾ of the length of the ladder. Both side rails need to rest secure against the support.
- Portable ladders must be firmly placed, held, tied or secured to prevent slipping or falling.
- A ladder is not to be used near a door unless the door is open, locked or guarded. For ladder use in a traffic area, barricades or guards need to be put in place. All access points to the ladder must be kept clear of tools, materials or debris. The top or top step of a step ladder shall not be used as a step. Do not go higher than the 2nd step from the top. Do not climb straight ladders higher than the third step from the top. Keep the end of the ladder at ‘belt buckle’ level.
- The cross bracing on the rear section of the step ladder shall not be used for climbing unless the ladder is designed and provided with steps for climbing on both front and rear sections.
- Stepladders and step stools are designed to be worked from, they are not to be used as straight ladders. They are provided where a minor elevation is needed. They should not exceed 20 feet in height and should be secured or held by another worker if they are greater than 10 feet in height.
- Employees will be trained to recognize hazards in the use of a ladder and to understand the procedures for ladder use. Emphasis will be on the following:
  - Fall hazards in the work area.
  - Correct procedure for erecting, maintaining and disassembling the fall protection systems.
  - Proper construction, use, placement and care in handling ladders.
  - The maximum intended load-carrying capacities of the ladder used.
VCSU SAFE OPERATING PROCEDURES:  
Heavy Equipment

Improper procedures used by VCSU employees can cause injury, disability, or death. By understanding and following safe operating procedures for use of heavy equipment, we can prevent injury for yourself and your coworkers.

**General Procedures**
Safe operating procedures for the following equipment (equipment powered by electric motors or internal combustion engines):

- Forklifts and power platforms
- Manlifts/Aerial Lift
- Tractors
- Loaders
- Road Graders
- Backhoe
- Trucks (dump and garbage)
- Snow removal equipment

Only trained and authorized operators shall be permitted to operate the designated equipment. Personal protective equipment is mandatory and may include the following:

- Boots or safety shoes
- Eye/face protection
- Long pants
- Hard hat
- Hearing protection
- Gloves

**Pre-start/Walk around Inspection**

- Check for loose or worn parts and repair or replace immediately.
- Check all fluid/coolant levels.
- **Caution: Open the radiator cap only when the engine is cooled.**
- Inspect hydraulic line connectors and hose for leaks before applying pressure to the system. Use paper or cardboard, not your hands, to search for leaks.
- **Caution: Hydraulic fluid escaping under pressure can penetrate skin and cause serious bodily harm.**
- Check tires for cuts, bulges, irregularities, abnormal wear and proper inflation.
- A fire extinguisher and first aid kit may be mounted in the cab of some equipment.

**Machine Maintenance**

- Ensure the cab area is clean and free of debris and tools.
- Clean windshield, mirrors and lights.
- Removal all oil, grease or mud and snow from grab irons, hand rails, steps, pedals and floor to prevent slips and falls.
- Remove or secure any loose items such as tools, chains or lunch boxes from the cab.

**Work Site**

- Check and mark the area for underground cables, gas lines and water mains.
• Know work area clearances—watch for overhead or underground objects, holes, drop offs, and partially hidden obstacles and wires.

Mount Properly

• **DO NOT GET ON OR OFF A MACHINE THAT IS IN MOTION!**
• Maintain a 3-point contact with the steps and hand rails while getting on/into the machine—do not use the controls or steering wheel as a handhold.
• Do not operate the machine with wet, greasy or muddy hands or shoes.

Refueling

• Shut off and cool the engine and any electrical equipment before fueling.
• Ensure the fueling area is well ventilated.
• Do not smoke while refueling. Keep open flames and sparks away from area.
• Do not use gasoline or diesel fuel for cleaning parts.
• Know where the fire extinguishers are located.

Shut Down/Parking

• Park on level ground.
• When parking on a grade, position at right angles to the slope, block the wheels and set the parking brakes.
• When parking, lower all loader, buckets and hydraulics to the ground.

Forklifts and Power Platforms
Including trucks, tractors, platform lift trucks, motorized hand trucks and other specialized industrial trucks powered by electric motors or internal combustion.

General Safety- Safe Operation:

• Only trained and authorized operators shall be permitted to operate a powered industrial truck.
• No person shall be allowed to stand or pass under an elevated part of a fork lift or truck whether loaded or empty.
• Do not drive a fork lift up to anyone standing at a fixed place.
• Unauthorized personnel shall not be permitted to ride on a powered industrial truck
• Use the proper hand signals and safety devices when working around other people.
• Yield right-of-way to pedestrians.
• Stunt driving and horseplay shall not be permitted.
• Speeds shall be maintained to keep the vehicle under control and the load managed.

Man Lifts/Aerial Lift
Man-Lifts/Aerial Lifts are intended for the conveyance of one person only.

General Safety - Safe Operation:

• Only trained and authorized operators shall be permitted to operate a powered industrial truck.
• Never exit or enter the platform by any other means than the access system provided and place the boom in the lowest position to the ground before shutting down or getting off the machine.
• Do not position the work platform near holes or drop-offs and never drive it into holes, curbs or other obstacles on the ground.
• If you should encounter a tipping situation, immediately retract the boom. DO NOT lower the boom in a tipping situation.
• Do not elevate the platform if wind speed exceeds 20 MPH (32 km/h).
• DO NOT EXCEED THE PLATFORM’S RATED CAPACITY (printed on the capacity plate on the machine). Be sure that any load on the platform is secure and evenly distributed.
• Be aware of all overhead clearances, especially when working around power lines.
• Employees shall stand firmly on the floor of the basket, and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.
• Maintain a FIRM FOOTING on the floor of the platform at all times. (NEVER CLIMB ONTO THE PLATFORM RAILING OR ONTO ANY OBJECTS ON THE PLATFORM FLOOR TO ATTAIN ADDITIONAL WORKING HEIGHT.)
• A full body harness shall be worn and a lanyard attached to the boom or basket when working from an aerial lift. **Please refer to 'VCSU SAFE OPERATING PROCEDURES: Fall Protection'.
• Always be aware of what is below, above, beside, before and behind the work platform during any elevating, lowering, extending, retracting, swinging, rotating, leveling, or driving function.
• Always look in the direction of travel.
• If you are unable to clearly see in the direction of motion, post a lookout or signal person before moving the work platform.
• Never position the platform into an overhead obstruction or put yourself in a position of interference between the platform and an overhead object.
• Avoid contacting the work platform and its occupants with external objects during operation. Exercise caution when lowering the platform to avoid descending onto objects or personnel below.
• Clear all personnel from the counterweighted superstructure area

Tractor
This is a one-person machine. There should be no other person allowed in or on the machine at the same time of operation.

General Safety - Safe Operation:

• An approved roll bar and seat belt must be installed for safe operation.
  o Do not use the seat belt if the roll bar is removed from the tractor.
• Drive at speeds compatible with the weather conditions and ground/road conditions. Watch for row ends, ditches and trees.
• Keep tractor in gear at all times in order to have full control of the tractor's speed in various situations/terrains.
• Follow the manufacturer's recommendations regarding towing and pulling equipment.

Snow Removal Equipment
Weather conditions dictate the callback and response of snow removal personnel. During normal school schedule, Facilities Services surveys the weather situations and campus conditions. Facilities Services removes snow and ice in a timely fashion when possible. During the weekend or holidays, Facilities’ Director determines the response of personnel (depending on the amount of snow and planned activities).

Snow Blowers
General Safety – Safe Operation

• Only trained and authorized operators shall be permitted to operate the designated equipment.
• Equipment must be in good condition. Inspections are to be done prior to each use for needed repairs or replacement items.
• Equipment such as tire chains, warning lights, and markings may be required.
• Keep your windshield and other window areas clean and clear for the best possible visibility. Use the windshield wipers and the window defrosters.
• Be alert for any children playing, pedestrians or obstructions covered by snow- such as manhole covers, curbs, bridge abutments, embankments and fire hydrants.
• Ensure all people are clear of the snow blowers/throwers.
• The snow should always be blown with the wind.
• Blow snow within the manufacturer’s recommended ground speeds.
• Ensure the snow removal attachment is fully raised and secured when not in use.
• Engage parking brake and disengage components before leaving machine.
• Observe and understand all the safety decals placed on machine.
• Never work on a snow removal machine with components running. Stop machine prior to unclogging, repair or refueling.

**Sweepers**
Hydraulic powered rotary attachment which sweeps debris 30 degrees to the right or left.

**General Safety- Safe Operation**

- Personnel must be clear of the brush and of all moving parts while operating the sweeper.
- Eye protection must be worn at all times by the operator and anyone within the discharge area of the brush.
- Sweep away from people, buildings, or cars- toward an open area.
- Turn engine and brush off to allow all moving parts to stop before adjusting or servicing the sweeper.
- This is a one operator vehicle- no riders are allowed on the sweeper or vehicle it is mounted on.
- Operate sweeper or tractor only with PTO guards and all protective shields in place.
- Do not dismount, mount or work on sweeper or loader with the sweeper arms in the raised position.

**Snow Plows and Tractors**
Vehicles such as tractors, pick-ups and end loaders are frequently used with plow attachments for clearing snow from larger areas. Such vehicles must be equipped with a flashing light for visibility and those operating in pedestrian areas should be outfitted with reverse alarming. Operators of such plow equipment must be constantly aware of potential hazards existing under the blanket of snow.

Pedestrians should never assume that working personnel and the operators of heavy equipment are able to see you. Pay attention and try to establish eye contact whenever possible.

VCSU will clear sidewalks first then concentrate on parking lots. Parking lot snow removal will begin when snowfall stops. As of fall 2011, the City of Valley City will be enforcing a “No Overnight Street Parking” all across campus- in efforts to make snow removal on campus more efficient and effective. After a snowfall, Public Works will be on campus around midnight (as the campus is now one of their top priorities for snow removal).

**Bobcat / Loaders**
Refer to the product documentation that accompanied your equipment for more information and specific instructions. Bobcat has provided a training video available at the Facilities Services office, or online at: [http://www.bobcat.com/trainings/safety/safety_videos](http://www.bobcat.com/trainings/safety/safety_videos)
VCSU SAFE OPERATING PROCEDURES:
Hand Tools/ Power Tools

Hand Tools
Hand tools are non-powered. They include anything from axes to wrenches. The greatest hazards posed by hand tools results from misuse and improper maintenance.

Safe Operating Procedure
When using hand tools, the following apply:

- Use proper eye protection (safety glasses, goggles or face shield).
- Use the right tool to complete a job safely and efficiently.
- Before using a tool, be sure it is in clean and good condition.
- Make sure saw blades, knives, or other tools are directed away from aisle areas and other employees working in close proximity.
- When using knives, always cut away from your body.
- Keep knives and scissors sharp; dull tools can be more hazardous than sharp ones.
- Around flammable substances, use spark-resistant tools made from brass, plastic, aluminum, or wood.
- Replace or repair all wooden handles that are loose, splintered, or cracked.
- Do not use impact tools such as chisels, wedges, or drift pins that have mushroomed heads.
- Do not lay tools down at the edge of a work bench. Do not lay tools where they could roll off, where someone could bump or trip over them.
- When you are finished with the tool, return it to its assigned area. Do not leave tools lying around.
- Only use a tool if you know how to use it properly. If you are unsure, check with a supervisor.
- Report any tools that are defective or in unsatisfactory condition to your supervisor.

Power Tools
Power tools can be extremely dangerous if they are used improperly. Common accidents associated with power tools include abrasions, cuts, lacerations, amputations, burns, electrocution, and broken bones.

When working around power tools, you must wear the necessary personal protective equipment (PPE) and avoid wearing loose clothing or jewelry that could catch in moving machinery. In addition to the general shop guidelines, the following apply when working with power tools:

- Operate power tools only if you are trained and familiar with the tool.
- Inspect all power tools and cords before using them. They should be clean and in good condition. Do not use a tool if the cord is damaged or lose.
- Make sure the work area is well lit - do not use the power tool if you cannot see the work area clearly.
- Make sure the tool is off before plugging it into a power source.
- Do not distract or disturb a co-worker who is using a power tool.
- Ensure that cords and hose are not posing a tripping hazard.
- Do not use power tools near areas of water.

Power Carpenter Tools
There are three types of carpenter power tools: electrical, pneumatic and hydraulic.

- See ‘VCSU SAFE OPERATING PROCEDURES: Shop Safety’ for additional information.

Air Compressors

- Only trained personnel should use an air compressor.
- Before each use, check the compressed air system and electrical components for signs of damage, deterioration, weakness and leaks. Repair or replace and defective parts.
• Never weld or drill holes in the air tank.
• Release air slowly when draining moisture or depressurizing the compressor system.
• Keep fingers away from a running compressor, fast moving and hot part could cause injury.
• Ensure all belt and pulley systems are operating properly and properly guarded.
• Never use an air compressor for the purpose of supplying breathing air.
• Never operate or repair in or near flammable gas or vapor.
• Never stand on or use the unit as a handhold.
• Disconnect power and release all pressure from the system before performing any maintenance work on the machine.
• Do not use extension cords with an air compressor.
• Do not exceed pressure limits for any component in the system.

Table Saw

• Always keep the blade guard and driving knife in place and in working order. Keep tools and cords in good repair and clean for better and safe performance.
• Keep work area clean and well lit.
• Disconnect tools when not in use and before performing any maintenance work.
• Avoid accidental starting; be sure switch is “OFF” when plugging in.
• Keep hands away from cutting area. Never touch the blade or other moving parts during use.
• Never leave tool running unattended.
• Avoid cutting nails and screws.
• Never start a tool when its rotating parts are in contact with the piece being worked on.
• Always secure work.
• Never stand or have any part of your body in line with the path of the saw blade. Do not reach over any moving parts.
• Never attempt to free a stalled saw blade without first turning the saw off and disconnecting from the power source.
• Avoid kickbacks by:
  o Keeping the blade sharp.
  o Keeping rip fence parallel to the saw blade.
  o Keeping riving knife, anti-kickback pawls and blade guard in place and operating.
  o Not releasing the work before it is pushed all the way past the saw blade.

Chainsaw

• Only trained and authorized personnel should be permitted to operate the designated equipment (Student Employees are NOT permitted to operate chain saws).
• Personal Protective Equipment is REQUIRED and includes:
  o Safety Goggles
  o Boots/Steel toe shoes
  o Snug fitting clothes
  o Hearing protection
  o Gloves
• Keep bystanders and animals out of work area
• Do not operate the unit when you are fatigued, ill or if you are under the influence of alcohol, drugs or medication.
• Do not operate a chain saw that is damaged, improperly adjusted or not completely and securely assembled.
• Do not start cutting until you have a clear work area, secure footing and a planned escape route.
• Prior to starting the engine, ensure that the nose of the saw is free of contact with other objects.
• Keep the handles dry, clean and free of oil.
• Operate the chain saw only in well-ventilated areas.
• Keep all parts of your body away from the saw chain when the engine is running.
• Carry the chain saw with the engine stopped, the guide bar and chain to the rear with the muffler away from your body. Use the appropriate guide bar safety cover.
• Shut off the engine before setting the chain saw down.
• Use caution when cutting small size brush- smaller material may catch the chain and pull you off balance.
• When cutting a limb that is under tension, be alert for spring back.
• Do not operate a chain saw in a tree unless you have been specifically trained to do so.
• All chain saw service should be performed by a professional.
• Avoid making cuts with the saw between your feet and legs- always cut with the saw to the outside of your legs.
• Never position yourself or others in line with the chain. A broken chain will fly forward in the direction the guide bar is pointing.
• Keep the chains clean to prolong life and to reduce the hazard of debris being thrown.

Drill Press

• Use the drill press in a well-lit area and on a level, clean, smooth surface to reduce the risk of trips and falls around running equipment.
• Always support the work piece so it doesn’t shift or bind on the tool.
• Always position backup material underneath the work piece.
• Use a drill press vise, do not do any “free hand” work, always fasten your stock to the table. Use fixtures to adequately hold, guide and position the work piece.
• Never move the head or table support while the tool is running.
• Before starting operation, jog the motor switch to make sure the drill bit or other cutting tools do not wobble or cause vibration.
• Use the bit and speed recommended of the job and work piece material.
• Never climb on the drill press table.
• When drilling wood or metal, raise the drill bit frequently to clean chips from the hole.
• Prior to start, center punches the areas to be drilled for an easier and less chance of slippage.

Machinery and Machine Guarding

Moving machine parts must be safeguarded to protect operators from serious injury. Belts, gears, shafts, pulleys, flywheels, chains, and other moving parts must be guarded if there is a chance they could come in contact with the operator or a bystander.

Hazardous areas that must be guarded include the following:
• Point of operation: Area where the machine either cuts, bends, molds, forms, or rotates.
• Pinch/nip point: Area where moving machine parts can trap, pinch, or crush (i.e., roller feeds, intermeshing gears, etc.).
• Sharp edges
• Stored potential energy
• Guards must be in place. If you notice that a guard is missing or damaged, contact your supervisor and have the guard replaced or repaired before beginning work.
Closing Statement

We are a laid back and fun department, but it is still important to remember that you are working in a professional environment and you must do your part in maintaining this atmosphere. Follow directions from your direct supervisor and ask questions when you are unsure of a procedure. We look forward to having you as part of our team!