VCSU SAFE OPERATING PROCEDURES:
Electrical Safety

Electrocution is one of the most common fatalities when working with and around electricity. Even if a person survives an electric shock, electrical burns, both internal and external, are extremely painful and can cause permanent disability. Electric shock can also cause involuntary muscle contractions causing a worker to fall off a ladder or scaffolding.

Electricity is an integral part of our every-day life, and sometimes we tend to take it for granted, not thinking about the potential danger.

Only authorized personnel shall be permitted to do any electrical service work on the VCSU Campus - including repairs, adjusting, testing or servicing electrical equipment. Governmental codes regulate these requirements and impose strict guidelines to follow in the area of electrical safety.

Basic Guidelines
Electricity travels unheard, unseen and rarely gives warning of a dangerous situation. There are basic guidelines to follow when you are around electricity:

- Never expose yourself or others to energized electrical circuit. No type of work, tests or adjustments on energized circuits are permitted unless authorized.
- Refrain from bringing or using personal portable electrical equipment such as radios, electric heaters, fans and lamps, etc. The Director of Facilities Services must approve such equipment prior to its being used on VCSU property.
- Electrical outlets or conduits shall not be installed by VCSU for the use of personal items.
- Check that all electrical implements are in safe working condition prior to use. If you have any doubts or questions regarding the safety of the equipment, notify your supervisor immediately and have the item or hazardous condition checked by the appropriate personnel.

Operation of Electrical Equipment
All electrical equipment is to be handled in a manner which will not cause damage. Preventative maintenance is necessary. Visually inspect all electrical equipment for the following before plugging in and using:

- Check all electrical cords before use to ensure they are free of cuts or nicks in the outer insulation. Make sure you are using the appropriate cord for the job and never lay a cord in an area where it could be damaged by vehicular or pedestrian traffic. Do not run cords through walls, under carpet or furniture, across doorways, or draped over heaters or equipment.
- Never unplug equipment by pulling the cord. Turn off the apparatus switch and then pull the plug from the receptacle. Wind the cord from the appliance to the plug to prevent cord damage.
- Be sure that all electrical equipment is unplugged before you leave the work area.
- Examine the plug to be sure the protective insulation is present and intact and that all the prongs are present and not loose.
- When plugging in the equipment, be sure the plug is correctly seated in the receptacle.
- Check all tools and equipment for loose or visually damaged parts, switches, shielding, nuts, bolts, etc. Do not use damaged, defective, or equipment that does not operate. Disconnect the plug, remove the damaged equipment from service and report any defects to your supervisor.
- Tools should be left to dry after a temperature change - moisture may condensate on the inside of the case and cause electrical shock if touched. If any shock sensation is felt when using the equipment, immediately shut it off, unplug it, and inform your supervisor.
- Inspect the receptacle before plugging in an electrical cord. Check for burn marks, cracks, broken insulation, missing or loose cover plates, and defects. Do not use the receptacle and notify your supervisor immediately.
- When your job is complete, recheck the tool/equipment to be sure it is ready for the next operator.
- Supervisors must see that all electricity powered equipment is scheduled for general maintenance.
When using electronic equipment/appliances, be aware of the following:

- A 3 foot clearance in front of all electrical panels must be maintained at all times. **NO STORAGE IS ALLOWED IN FRONT OF PANELS!**
- Extension cords are not allowed as permanent wiring. When extension cords are not in use, unplug and properly store.
- Surge protectors are recommended to protect equipment, but they do not protect from hazards of an overloaded circuit. Some signs of an overloaded circuit are:
  - Outlet or wall is warm to the touch.
  - Outlet is discolored.
  - Circuit breakers frequently trip or fuses frequently blow.
  - A burnt smell of insulation is noticeable.
  - Extension cord is warm to the touch.
- Contact Facilities Services to schedule an electrician to install outlets and circuits where needed.
- Surge protectors must be plugged directly into the outlet. DO NOT use surge protectors with extension cords and/or another surge protector.

**Training**
Supervisors must ensure that all employees working with electricity fully understand and are aware of the safe operating procedures.