NSU Florida

ENVIRONMENTAL HEALTH AND SAFETY

Working Alone Policy

As a practice, working alone with hazardous materials, equipment or otherwise working under conditions that may create the risk of serious injury (hereafter referred to as hazardous conditions) should be avoided.

Anyone at NSU (Faculty, Staff, NSU Graduate Students) who works alone in (or intend to work alone in) potentially hazardous conditions (in any location, i.e. laboratories, shops, field work) that may result in injury or serious harm must discuss this activity with their Principal Investigator (PI) or supervisor prior to conducting the work and determine that the risk of working alone is controllable under the specific conditions established by the PI or supervisor of the work. If the PI or supervisor determines that the risk cannot be minimized to a controllable level, then the individual should perform the work only when others are present or where a suitable alarm device is available that will summon help immediately.

Written approval to perform work alone in a lab should only be granted after a risk assessment is performed and reviewed by the PI or supervisor with the individual and the assessment confirms no hazardous materials or conditions exist.

Furthermore, per NSU does not permit undergraduates to work without the supervision of faculty in laboratories.

Scope

While it is recognized that nearly all activities in a laboratory could result in serious injury (e.g., cuts from broken glass or hitting one’s head in a fall) the intent of this policy is to have the PI or supervisor and the individuals involved make a careful assessment of the activities involved that may create a potentially hazardous condition.

This policy does not apply to areas outside laboratories such as offices, conference rooms, break rooms, or classrooms, where hazardous materials, equipment, or

operations are not expected to be present. It is intended to mitigate those incidents or accidents where there is an immediate need for assistance from one or more individuals to provide help and/or call for assistance (e.g., emergency responders).

Working alone applies to any time night or day. Working alone means when no one else is in direct line of sight or within sound of the person.

Hazardous Conditions Assessment

Hazardous conditions that can result in immediate injury or death must be defined by the PI or supervisor with assistance from the NSU Environmental Health and Safety Department (EHS) on a case-by-case basis. Once this review is done it does not need to be repeated for subsequent similar activities.

A risk assessment should be completed prior to initiation of the potentially hazardous work as required by the Chemical Hygiene Plan, Hazard Communication Plan, Job Safety Analysis, Standard Operating Procedure, or other relevant policies or procedures.

Graduate Student Guidance

For graduate students to work alone in a laboratory, the following process shall be followed with the understanding that approval is based on the PI's or supervisor's assessment that the graduate student has adequate skills and responsibility to perform the work under the specified conditions.

1) A risk assessment is completed to identify all potentially hazardous materials and work. The risk assessment must be in writing. Contact EHS Office if assistance is needed with risk assessment.

2) Personal Protective Equipment (PPE) is reviewed and training provided on proper use and limitations.

3) Graduate students must be trained on all procedures in the lab that they will be performing and training completion must be documented.

4) Available standard operating procedures are provided, reviewed and accessible.

5) Working Alone Checklist and Graduate Student Working Alone Permission Form are

completed with necessary signatures. (See Appendices).

Graduate students conducting work related to a class with a course registration number (CRN) must conduct work during working hours of 7 AM to 10 PM. Graduate students working alone in labs for the purpose of research not associated with a class, may work with the PI to establish agreed upon hours. **No work** will be permitted during hours when the University is officially closed, such as holidays.

This review need only be done and agreed to once for generic operations where the risks will not change; provided the conditions agreed to are followed and shall be repeated each time. New approval is needed each time the hazardous material, equipment or operation change or for each new location/lab.

Risk Assessments

Factors to consider when making the risk assessment are: toxicity, reactivity, corrosivity, explosivity of the material; quantity; control procedures (PPE, fume hoods, shields, etc.); availability of emergency equipment such as eye washes and emergency showers; potential energy of the equipment or material; complexity of machinery or equipment; difficulty of manipulations; training; experience; and demonstrated good judgment of the individual; level of uncertainty about any of the above. All these lead to determining the level of control that is needed and can be maintained to reduce the risk.

Some examples of controls that can be used to eliminate or reduce risk to an acceptable level are:

1. Perform the activity in a fume hood or glove box or other enclosure
2. Limiting the quantity of materials
3. Wearing appropriate PPE

Some examples of materials or activities where working alone is prohibited are; see Appendix A for more details:

1. Work with pyrophoric materials
2. Work with highly reactive materials
3. Work involving entry into a confined space

4. Work around high voltage
5. Certain machine shop activities

Before allowing a person to work alone, a risk assessment should be completed and the findings recorded. The assessment should include:

1. Identification of hazards within the area.
2. Identification of methods and frequency of communications.
3. Can any temporary access equipment, such as portable ladders or trestles, be safely handled by one person?
4. Can all the machinery and goods involved in the workplace be safely handled by one person?
5. Are there any chemicals or hazardous substances being used that may pose a risk to the worker?
6. Does the work involve lifting objects too large for one person?
7. Is more than one person needed to operate essential controls for the safe running of equipment or workplace transport?
8. Possibility of violence.
9. Medical fitness of the person working alone – possibility of illness.
10. Possibility of accidents – consider the activities taking place e.g. accessing ladders or steps.
11. If the lone worker's first language is not English, are provisions made for clear communications, especially in case of emergency?
12. Requirements for first aid training.
13. How can supervision/advice be provided easily.
14. Methods of raising the alarm in the event of no contact within an agreed time.

The risk assessment performed by the PI or supervisor should help decide the right level of supervision. Identify the hazards of the work, assess the risks involved, and put measures in place to avoid or control the risks. It is important to talk to employees and their safety representatives as they are a valuable source of information and advice. This will help to ensure that all relevant hazards have been identified and appropriate controls chosen.

If other NSU policies are stricter, they will override this policy. Examples may include policies from the Radiation Safety Committee, Institutional Animal Care and Use Committee (IACUC), Institutional Biosafety Committee (IBC), and Embryonic Stem Cell Research Oversight (ESCRO).

Appendix A

Prohibited Work Activities-Working Alone

Chemical

1. Work outside of a dry inert glove box with pyrophoric, or water reactive materials are prohibited. If the work can be done completely inside the dry inert glove box, the work is not prohibited. Exceptions are possible with an approved work plan.
2. Chemical reactions involving high pressure such as hydrogenation, polymer bomb reactions, or other high pressure reactions are prohibited unless a work plan can be established with EH&S.
3. Work involving Highly Energetic Materials in excess of 100 mg is prohibited at all times without an approved work plan. A work plan is required for scale up beyond 100 mg at any time.
4. Temperature unstable, shock sensitive, or other special property materials that can pose a threat to safety require a work plan.
5. Scale up to large volume reactions such as Grignard reactions are prohibited without an approved work plan.

Biological

1. Work involving infectious materials, toxins or chemicals that require immediate medical attention if an exposure occurs are prohibited without a work plan.

Radiological

1. Tritium, iodination or other volatile radiological materials require a work plan.
2. Use of high level sources require a work plan.
3. Use of energized equipment or Class IV lasers requires a work plan.

Physical

1. Working in a machine shop requires a work plan. Use of large rotary equipment such as a lathe, drill press, or grinder may remain prohibited when working alone regardless of the time of day.
2. The use of extreme temperature, pressure, voltage, or other force requires a work plan.

NOTE: No materials may be brought into the lab that are not approved by the supervising staff. (i.e. all chemicals must be approved by the supervising staff or purchased through the University procurement policies).

Appendix B

Working Alone Checklist

Employee Name: _____ Date: _____

Contact Details: _____

Contact Phone Number(s): _____

Emergency Phone Numbers: _____

Department: _____ Supervisor Name:_____

Name and Contact Info. for Person checking on employee: _____

Method to be used for checking on employee: _____

Intervals the employee will be contacted:_____

Location of Activity: _____

Has a risk assessment (must be attached) been conducted for this task?	Yes	No
Is the employee trained in working alone procedures?	Yes	No
Is the employee aware of all risks associated with the task?	Yes	No
Has a safety inspection been completed prior to operating any equipment?	Yes	No
Have emergency plans been discussed?	Yes	No
Is Personal Protective Equipment (PPE) and training on proper use available?	Yes	No
Have Standard Operating Procedures (SOPs) been provided and discussed?	Yes	No
Have additional controls been put in place during this task/activity?	Yes	No

Please contact EHS for assistance with any of the above questions.

Communication Arrangements: _____

Action to be taken if contact is not made in accordance with above schedule:

_____

Declaration: I am aware and agree to abide by all Nova Southeastern University and other applicable procedures when working outside normal business hours, and/or working alone, and/or in isolation. I agree to abide by any additional requirements as listed in the attached risk assessment for this activity.

Signature of Graduate Student/Staff: _____

Signature of PI or Supervisor: _____

Duration of Approval: From _____ to _____

Send copy of completed form to EHS Office.

Appendix C

Graduate Student Working Alone Permission Form

THE GRADUATE STUDENTS LISTED BELOW HAVE PERMISSION TO WORK ALONE IN THE FOLLOWING LABORATORIES/SPACES (indicate room numbers or specific location):	
Name(s)	Location(s)
AFTER A RISK ASSESSMENT WAS PERFORMED, PERMISSION IS GRANTED UNDER THE FOLLOWING CONDITIONS (indicate specific activities or materials and any restrictions):	
DATES WHEN WORK WILL BE CONDUCTED (Could be specific days or an extended period, e.g. a semester):	
SIGNATURES (Any change in the location, conditions or dates should be amended in this form and initialed or a new form should be issues.):	
Principal Investigator:	
Graduate Student(s):	
Laboratory Supervisor (if using a lab not under the supervision of PI):	
Department Chair (where lab is located):	
EHS:	

Provide the completed form to Center Designee to coordinate access with PSO.