Fall Protection Program

Contact: Director of Risk Management, 541-956-7061

- 1. Rogue Community College is committed to providing a safe and hazard free workplace to all employees. Rogue Community College is also committed to complying with all applicable federal, state and local health and safety codes and regulations as well as standards implemented by the American National Standards Institute. To ensure that all affected employees are provided with the necessary information and training concerning the dangers associated with fall hazards, Rogue Community College has implemented the following Fall Protection Program. All employees of Rogue Community College will participate and comply with all sections of the Fall Protection Program. The written Fall Protection Program will be reviewed, updated and maintained by the Rogue Community College Risk Management Department. A printed copy of the plan is available at the Risk Management office. Any location or work function that is not covered under this program requires a specific Fall Protection Plan that must be submitted to Risk Management for approval prior to the start of the work.
- All contractors, vendors and or other third parties doing business with Rogue Community College at any facility owned or operated by Rogue Community College are required to meet or exceed the requirements of this Fall Protection Program and the requirements of Oregon OSHA.
- 3. Document Retention Risk Management is the college department tasked with document retention related to the Fall Protection Program. Risk Management will maintain the following documents for the duration listed below.
 - a. All facility work orders related to the installation, servicing, repair or removal of any fall protection equipment or systems.
 - b. All documentation submitted by a Qualifed Person designated by Rogue Community College to provide fall protection training, stating that an employee has received both classroom and practical hands on training for each area of the Fall Protection Program.
 - c. All documentation related to the annual inspection of all personal fall protection systems by a Qualified Person designated by Rogue Community College.
 - d. All documentation related to the initial inspection by an engineer and all subsequent 5-year inspections of all anchors points by a Qualified Person designated by Rogue Community College.

- e. All documentation related to locations or specific work functions that are not addressed in this program and that require a Fall Protection Plan.
- 4. Fall Protection Assessments Oregon OSHA requires fall protection when a fall hazard of four or more feet exist in the workplace under most conditions. Rogue Community College continuously monitors, evaluates and implements controls to protect employees from fall hazards.
 - a. The following control measures will be used by Rogue Community College to address fall hazards in the workplace.
 - i. Elimination of the fall hazards is the first, and best, line of defense against falls from heights. If the hazard is eliminated, and the employee does not have to perform work at heights, there is no more fall hazard.
 - ii. Prevention of the fall hazards is the second line of defense, and will be used when it is not possible to eliminate the hazard. Examples include changes to the physical work area, such as adding stairs, guardrails and barriers to prevent the employee from being directly exposed to the fall hazard.
 - iii. Control of the fall hazards is the last line of defense, and will be used only when elimination and prevention of fall hazards cannot be utilized. Fall controls use fall protection such as safety nets or harnesses, and fall arrest systems. These controls reduce the risk of injury if a fall happens.
- 5. Fall Protection Training The Risk Management Department will ensure that all employee training related to the College's Fall Protection Program is completed by a Qualified Person designated to conduct fall protection training by Rogue Community College before the employee begins any work in which he or she could be exposed to a fall hazard. Documentation of that training will be completed by the Qualified Person, signed by the employee and submitted to the Risk Management Department as part of the employee's permanent safety file.
 - a. Retraining is required whenever an employee is exposed to a new type of fall hazard, is required to use different fall protection equipment or devices or when it is determined that the employee's level of proficiency or compliance with the Fall Protection Program is in doubt.
- 6. General Fall Protection Requirements in the Workplace The following are required as part of the General Industry requirements outlined in OAR 427 Division 2. If any activity is undertaken that could be classified as Construction, separate regulations and standards are required as outlined in OAR 427 Division 2 Section R.

- a. All places of employment, passageways, storerooms, service rooms, and walking-working surfaces are kept in a clean, orderly, and sanitary condition.
- b. The floor of each workroom is maintained in a clean and, to the extent feasible, in a dry condition. When wet processes are used, drainage must be maintained and, to the extent feasible, dry standing places, such as false floors, platforms, and mats must be provided.
- c. Walking-working surfaces are maintained free of hazards such as sharp or protruding objects, loose boards, corrosion, leaks, spills, snow, and ice.
- d. Guard open-sided floors, walkways and platforms above or adjacent to dangerous equipment, pickling or galvanizing tanks, degreasing units, and other similar hazards, regardless of height with a railing and toe-board.
- e. Guard open-sided floors and platforms 4 feet or more above adjacent floor or ground level by a railing. The entrance to a ramp, stairway, or fixed ladder does not need a railing.
- f. Protect each employee on a scaffold more than 10 feet above a lower level, by providing personal fall arrest systems or guardrails.
- g. Make sure all persons on the platform of boom-supported elevating work platforms wear a full body harness and lanyard fixed to manufacturer provided and approved attachment points.
- h. Make sure work platforms have standard guardrails and toe boards on all sides.
- i. When entrance covers are removed, promptly guard the opening with a railing, temporary cover, or other temporary barrier to prevent accidental falls through the opening and protect entrants from objects falling into the space.
- j. When working in a confined space, ensure each entrant uses a full-body harness with a retrieval line attached to the harness at the center of the employee's back, near shoulder level; or above the employee's head; or at another point which presents a profile small enough for the successful removal of the employee. Then attach the retrieval line to a mechanical device or fixed point outside the space, so rescue can begin as soon as necessary. If the vertical space is more than 5 feet deep, a mechanical device must be available for retrieval.

k. Wherever there is a danger of falling through an unprotected skylight opening, or the skylight has been installed and is not capable of sustaining the weight of a 200-pound person with a safety factor of four, you must provide standard guardrails on all exposed sides or the skylight must be covered. Personal fall arrest equipment may be used as an equivalent means of fall protection when worn by all employees exposed to the fall hazard.

7. Roof Fall Protection Requirements

- a. Steep Pitched Roofs. Regardless of the work activity, you must ensure that employees exposed to fall hazards of 4 feet or more while working on a roof with a pitch greater than 2 in 12 use one of the following:
 - i. Fall restraint system. Safety monitors and warning line systems are prohibited on steep pitched roofs
 - ii. Fall arrest system
 - iii. Positioning device system
- b. Low-Pitched Roofs. You must ensure that employees exposed to fall hazards of 4 feet or more while engaged in work, other than roofing work or leading edge work, on low-pitched roofs use one of the following. A low-pitched roof is a roof with a pitch less than 2 in 12.
 - i. When work is performed less than 6 feet (1.6 m) from the roof edge, the employer must ensure each employee is protected from falling by a guardrail system, safety net system, travel restraint system, or personal fall arrest system.
 - ii. When work is performed at least 6 feet (1.6 m) but less than 15 feet (4.6 m) from the roof edge, the employer must ensure each employee is protected from falling by using a guardrail system, safety net system, travel restraint system, or personal fall arrest system. The employer may use a designated area when performing work that is both infrequent and temporary.
 - iii. When work is performed 15 feet (4.6 m) or more from the roof edge, the employer must:
 - Protect each employee from falling by a guardrail system, safety net system, travel restraint system, or personal fall arrest system or a designated area. The employer is not required to provide any fall protection, provided the work is both infrequent and temporary; and
 - 2. Implement and enforce a work rule prohibiting employees from going within 15 feet (4.6 m) of the roof edge without using fall protection

8. Fall Protection Equipment

a. Fall Restraint System

i. Uses a body harness with a lanyard or lifelines and anchorage. A fall restraint system is rigged so that the worker cannot fall any distance at all. In other words, the fall restraint system is a tether that prevents the worker from going past the point at which the worker could fall.

b. Fall Arrest System

- i. Is designed to protect you after you fall, by stopping you before you fall too far, and before you hit anything below.
- ii. Consists of the following components:
 - 1. Full body harness (not just safety belt)
 - 2. Lanyard or lifeline
 - a. Double hook Snap hook and other connectors
 - b. Anchorage
 - c. Deceleration device or energy absorption device
- iii. Allows no more than 1,800 lbs. of force on the workers when the fall stops.
- iv. Never allow the worker to free fall more than six feet.
- v. Once deceleration begins and free falls end, stop the worker completely within three ½ feet.
- vi. Be strong enough to withstand twice the maximum energy created by the worker during free fall.

c. Positioning Device System

- A body harness rigged to allow a worker to be supported on a wall, concrete form or rebar structure, and be able to work with both hands while leaning away from the structure.
- ii. The body belt or body harness must be rigged so that if the worker's feet slip, the worker can free fall no more than two feet.

d. Safety Monitor System

- i. Is a fall protection option that can only be used for flat or low slope roofs.A low slope roof has a pitch of 2 to 12 or less.
- ii. Rogue Community College must designate a competent person to be a safety monitor. The safety monitor is responsible for:
 - 1. Being competent to recognize fall hazards and recognize when a worker is in danger of falling.
 - 2. Be on the same work surface as the workers and be able to see them.

- 3. Be close enough to the workers to be able to speak with them.
- 4. Pay close attention to the safety of the workers on the roof.
- 5. Warn workers if they are close to the edge or other fall hazards.
- 6. Not engage in any other activity while acting as the safety monitor.
- iii. Rogue Community College must make sure than no vehicles or mechanical equipment is used or stored in the safety monitoring area.
- iv. That no worker or other person enters the safety monitoring area unless they are engaged in the work being done.
- v. That all workers in the safety monitoring area have been instructed to immediately comply with the fall hazards warnings given by the safety monitor.

e. Warning Line System

- i. A warning line system uses a line of rope, wire or chain, supported by stanchions, placed around the work area on a flat roof. The warning line must be erected around all sides of the work area, and must be at least 5 feet from any roof edge. If mechanical equipment operates in a direction perpendicular to a roof edge, then the warning line on that side must be at least 10 feet from the edge.
- ii. Only workers engaged in the work are allowed inside the area marked by the warning line. These workers are allowed to work without any conventional fall protection.
- iii. The warning line must have a strength of 500 lbs. It must have high visibility flags every 6 feet. The lowest point of the line must be between 34 and 39 inches above the roof surface.

f. Safety Watch System

 A fall protection system in which a competent person monitors one worker who is engaged in repair work or servicing equipment on low pitched roofs only.

g. Guard Rails

- You must ensure that a standard railing consists of top rail, intermediate rail, and posts, and has a vertical height of forty-two inches, plus or minus three inches, from upper surface of top rail to floor, platform, runway, or ramp level.
- ii. The intermediate rail must be approximately halfway between the top rail and the floor, platform, runway, or ramp.
- iii. A strength to withstand at least the minimum requirement of 200 pounds top rail pressure.

- iv. You must ensure that a standard toeboard is a minimum of 4 inches nominal in vertical height from its top edge to the level of the floor, platform, runway, or ramp. It must be securely fastened in place and with not more than 1/4-inch clearance above floor level. It may be made of any substantial material either solid or with openings not over one inch in greatest dimension.
- h. Anchor Points are the connections for both vertical and horizontal personal fall arrest systems. They may be as simple as a D-ring or eyebolt mounted at an appropriate location. Alternatively, they can consist of subsystems such as posts, brackets, trolleys, and other mobile devices. They can support lifelines, nets, guardrails, and stair rails. They are designed for anticipated static and dynamic forces during a fall.

9. Fall Protection required by Activity

a. Performing Leading Edge Work

 Any activity involving leading edge work will be coordinated with Risk Management in advance and will require the completion of a job specific Fall Protection Plan.

b. Confined Space Entry

i. Any activity that involves entering a permit or non-permit required confined space and that requires the use of fall protection systems or equipment will be considered a permit-required confined entry space and will be coordinated with Risk Management in advance and will require the completion of a job specific Fall Protection Plan and Confined Space Permit Entry Plan.

c. Operating Scissors Lifts

- Do not operate Scissor Lifts unless you have been trained and authorized to do so by Rogue Community College.
- ii. Operator is required to comply with all manufacturer's requirements for inspection, operation and maintenance.
- iii. Complete a thorough inspection of the Scissor Lift before operation.
- iv. Scissors Lifts do not require personal fall protection if the guardrails are functioning. However, personal fall protection is always encouraged.
- v. Do not sit, stand or climb on the platform guardrails. Maintain a firm footing on the platform floor at all times.
- vi. Do not climb down from the platform when raised.
- vii. Keep the platform floor clear of debris.

- viii. Attach the platform entry chain and close the entry gate before operating.
- ix. Do not operate the machine unless the guardrails are properly installed and the entry is secured for operation.

d. Operating Boom Lifts

- i. Do not operate Room Lifts unless you have been trained and authorized to do so by Rogue Community College.
- ii. Operator is required to comply with all manufacturer's requirements for inspection, operation and maintenance.
- iii. Complete a thorough inspection of the Boom Lift before operation.
- iv. You must make sure boom and platform load limits specified by the manufacturer are not exceeded.
- v. You must make sure persons stand firmly on the floor of the platform and do not:
 - 1. Sit or climb on the edge of the platform; or
 - 2. Use guardrails, planks, ladders, or any other device to gain additional height or reach.
- vi. You must prohibit wearing climbers when working from the platform.
- vii. You must make sure all persons on the platform wear a full body harness with a lanyard attached to either:
 - 1. The manufacturer's recommended attachment point;
 - 2. The boom or platform if the manufacturer does not specify an attachment point.
- viii. You must never attach a lanyard to an adjacent pole, structure, or equipment.

e. Elevator Shafts

i. Any activity that involves entering an elevator shaft and working at elevation while inside the shaft will be coordinated with Risk Management in advance and will require the completion of a job specific Fall Protection Plan. It may also require the completion of a permitrequired confined entry space.

10. Fall Protection Equipment Inspections and Required Documentation

a. Belt Inspection

i. Beginning at one end, holding the body side of the belt toward you, grasp the belt with your hands six to eight inches apart. Bend the belt in an

- inverted "U". The resulting surface tension makes damaged fibers or cuts easier to see.
- ii. Follow this procedure the entire length of the belt or harness. Watch for frayed edges, broken fibers, pulled stitches, cuts, or chemical damage.
- iii. Special attention should be given to the attachment of buckles and Dee Rings to webbing. Note any unusual wear, frayed or cut fibers, or distortion of the buckles or Dees.
- iv. Inspect for frayed or broken strands. Broken webbing strands generally appear as tufts on the webbing surface. Any broken, cut, or burned stitches will be readily seen.
- v. Rivets should be tight and immovable with fingers. Body side rivet base and outside rivet burr should be flat against the material. Bent rivets will fail under stress. Especially note condition of Dee Ring rivets and Dee Ring metal wear pads (if any). Discolored, pitted or cracked rivets indicate chemical corrosion.
- vi. The tongue, or billet, of the belt receives heavy wear from repeated buckling and unbuckling. Inspect for loose, distorted, or broken grommets. Belts using punched holes without grommets should be checked for torn or elongated holes, causing slippage of the buckle tongue.
- vii. Tongue Buckle: Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. Roller should turn freely on frame. Check for distortion or sharp edges.
- viii. Friction Buckle: Inspect the buckle for distortion. The outer bars and center bars must be straight. Pay special attention to corners and attachment to points of the center bar.
 - ix. Sliding Bar Buckle: Inspect buckle frame and sliding bar for cracks, distortions, or sharp edges. Sliding bar should move freely. Knurled edge will slip if worn smooth. Pay special attention to corners and ends of sliding bar.

b. Lanyard Inspection

- i. When inspecting lanyards, begin at one end and work to the opposite end. Slowly rotate the lanyard so that the entire circumference is checked. Spliced ends require particular attention. Hardware should be examined under procedures also detailed below.
- ii. Steel: While rotating the steel lanyard, watch for cuts, frayed areas, or unusual wearing patterns on the wire. Broken strands will separate from the body of the lanyards.

- iii. Webbing: While bending webbing over a pipe or mandrel, observe each side of the webbed lanyard. This will reveal any cuts or breaks. Swelling, discoloration, cracks, and charring are obvious signs of chemical or heat damage. Observe closely for any breaks in stitching.
- iv. Rope: Rotation of the rope lanyard while inspecting from end to end will bring to light any fuzzy, worn, broken, or cut fibers. Weakened areas from extreme loads will appear as noticeable change in original diameter. The rope diameter should be uniform throughout, following a short break in period.

c. Anchor Point inspection

- i. Anchor points will be installed and inspected by a qualified engineer.
- ii. Anchor points will be inspected and recertified by a Qualified Person every 5 years following installation and whenever any work is done to the anchor points or the supporting structure.
- d. A visual inspection of all safety equipment will be done daily or before each use. Any defective equipment will be tagged and removed from use immediately.
- e. The manufacturer's recommendations for maintenance and inspection will be followed.
- f. All equipment will also be inspected every 6 months by a Qualified Person and the results of that inspection will be documented by the Qualified Person. A copy of that documentation will be forwarded to the Risk Management Department.
- g. If any equipment is taken out of service for repair or disposal, a notice will be sent to Risk Management detailing the exact piece of equipment, the issues that resulted in the equipment being removed from service, the individual or company that will provide repair services or the date and method of disposal if the equipment is not able to be repaired.
- h. Keep all equipment away from chemicals and do not expose to UV light. Store in a clean and dry location.

11. Emergency Procedures

a. In the event that an individual sustains a fall that requires assistance to rescue that individual or to treat injuries sustained during the fall, the following procedures will be followed.

- b. If the individual has sustained any potential injuries, notify 911 immediately. Then contact Risk Management.
- c. If the individual has not sustained any injury, contact Risk Management.
- d. Determine if a self-rescue, aided rescue or mechanically aided rescue is required.

12. Ladder Safety

- a. Ladders are used only for the purposes for which they were designed.
- b. Choose the proper ladder for the task and location.
- c. The use of handmade or personal made ladders is prohibited at all times.
- d. Connecting multiple ladders together is prohibited at all times.
- e. Using a ladder in any manner for which it was not intended or is in violation of the manufacture instructions is prohibited at all times.
- f. All manufactures instruction will be followed to include maximum ladder load, maximum ladder height, ladder positioning. Ladders are rated as follows:
 - i. Type 1AA Rated for 375 lbs. max
 - ii. Type IA rated for 300 lbs. max
 - iii. Type I Rated for 250 lbs. max
 - iv. Type II Rated for 225 lbs. max
 - v. Type III Rated for 200 lbs. max
- g. You must make sure a ladder is not moved, shifted, or adjusted while anyone is on it.
- h. You must secure the ladder at the top and bottom when working from it.
- Ladders should be stored in well-ventilated areas to prevent mechanical, gravitational, water or chemical damage and in such a manner as not to create a potential trip hazard.
- j. You must use a safety belt with a lanyard that is secured to the ladder when doing any work that:
 - i. Requires the use of both hands; and

- ii. Is done from a ladder more than twenty-five feet above the ground or floor.
- k. Work will not be done from a ladder more than twenty-five feet above the ground or floor if the work requires wearing eye protection or a respirator, or requires the use of both hands or involves the use of pressure washing equipment unless appropriate fall protection equipment is utilized.
- I. Any ladder that is determined to be unsafe should be removed from service immediately. A determination will need to be made by a competent person if the ladder can be serviced and repaired or if the ladder needs to be destroyed.

13. Definitions

- a. Aerial Lift is any vehicle-mounted work platform that can move vertically and/or horizontally. Some aerial lifts can even rotate around a vertical axis.
- Anchorage Point Is a secure point of attachment for lifelines, lanyards, deceleration devices, or self-retracting lanyards. Must be capable of supporting 5,000 lbs. per individual attached to the point. Must be inspected during installation by a qualified engineer and every 5 years by a Qualified Person.
- c. Cage means an enclosure mounted on the side rails of a fixed ladder or fastened to a structure behind the fixed ladder that is designed to surround the climbing space of the ladder. A cage also is called a "cage guard" or "basket guard."
- d. Competent Person A person who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. By way of training and/or experience, a competent person is knowledgeable of applicable standards, is capable of identifying workplace hazards relating to the specific operation, and has the authority to correct them.
- e. Deceleration Device A mechanism that dissipates or limits energy imposed on a person during Fall Arrest. May be rip stitch lanyards or automatic self-retracting lifelines or special woven lanyards.
- f. Dockboard means a portable or fixed device that spans a gap or compensates for a difference in elevation between a loading platform and a transport vehicle.

- Dockboards include, but are not limited to, bridge plates, dock plates, and dock levelers.
- g. Fall Arrest System Used to protect an individual from falling more than 6 feet or striking a lower surface or object.
- h. Fall Restraint System Uses a body belt or body harness with a lanyard or lifelines and anchorage. System does not allow an individual to fall any distance.
- i. Floor Openings An opening measuring 12 inches or more in any floor or platform through which a person may fall.
- j. Lanyards Is a device, which connect an individual to the anchorage point.
- k. Leading Edge Work A work area on a low-pitched roof that starts at the edge of the roof and continues 6 feet away from the edge.
- I. Lifelines Are flexible lines, which connect to an anchorage point at one end to hang vertically, or both ends to stretch horizontally.
- m. Low Pitched/Sloped Means a roof that has a slope less than or equal to a ratio of 2 in 12 (vertical to horizontal).
- n. Qualified Person A person who, by possession of a recognized degree, certificate or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated their ability to solve or resolve problems related to the subject matter, the work or the project.
- Personal Fall Arrest System Consists of an anchorage, connectors, and a body harness and may include a deceleration device, lifelines or suitable combination.
 Designed to protect an individual after a fall by stopping you before you fall too far and before you hit anything below.
- p. Position Device System Is a body belt or body harness rigged to allow a worker to be supported on a wall, concrete form or rebar structure and be able to work with both hands free while leaning away from the structure.
- q. Safety Monitor System Is a fall protection system that requires a competent person be designated as a safety monitor. The safety monitor will be on the same walking/working surface as the personnel working, and be within visual sighting distance of personnel being monitored, will wear a highly visible vest for

easy identification, will remain inside the safe zone of the roof (i.e. more than 6 feet away from the edge), will ensure that personnel do not engage in unsafe practices, and warn them when it appears that they are unaware of a fall hazard situation, will be close enough to communicate orally with personnel, and will not have other responsibilities which could take their attention from their monitoring function.

- r. Scissor Lift is a mobile scaffold for which the platform only moves vertically.
- s. Self-retracting lanyard or life line A deceleration device consisting of a drumwound line that retracts or extends from the drum with normal Employee movement but in the event of a fall the drum automatically locks. If Free-Fall is limited to two feet or less the components must be capable of sustaining a minimum static tensile load of 3,000 lbs. but if the Free-Fall can exceed two feet a 5,000 lb. tensile load strength is required
- t. Warning Line System Means a barrier of rope, wire or chains erected to warn employees that they are approaching an unprotected side or edge and which designates an area in which work may take place without the use of other means of fall protection.