Emergency Management at Luchetti Building at RUM

Emergencies can come without warning at any time. Being prepared physically and psychologically to handle unexpected accidents or disasters is an individual as well as an organizational responsibility.

This guide was developed assist in minimizing effects from such events. Please read the contents thoroughly. Once you are familiar with the information, you will be able to protect yourself and perhaps save the life of someone else. The information included in this guide is intended to cover most emergency actions, but is not all-inclusive. Common sense must prevail when instructions are not available. No matter what the crisis, THINK before you ACT, then act swiftly to minimize your exposure to danger. YOUR SAFETY IS OF PRIMARY IMPORTANCE.

If you have questions concerning a unique situation not covered in this manual or if you wish additional information regarding emergency preparedness, contact:

Emergencias Médicas Municipal – Mayagüez: 9+(787) 265-0050 Policía Estatal – Mayagüez: 9+(787) 832-2020 Policía Municipal – Mayagüez: 9+(787) 834-0378 Bomberos Estatal – Mayagüez: 9+(787) 832-2330 Bomberos Municipal – Mayagüez: 9+(787) 832-1212 Manejo de Emergencias Estatal – Mayagüez: 9+(787) 833-7272 Manejo de Emergencias Municipal – Mayagüez: 9+(787) 831-5454 9+(787) 834-6000 Hospital Bella Vista: **Hospital Perea:** 9+(787) 834-0101 9+(787) 834-0050 **Hospital San Antonio:**

All emergencies should be reported to: (787) 832-4040
Campus Police x 3263 & 3872

Campus Medical Emergencies UPRM x 2333 3865 & 3405

Office of Health and Safety UPRM (EH&S) x 3506 & 3221

Revised: July 29, 2013

Document location: http://ingenieria.uprm.edu/inme/help

WHAT YOU CAN DO NOW:

Get to know the Emergency Response Team in your building. Vital components of the comprehensive RUM response and recovery plan are the emergency responders on each floor and in each building throughout the campus.

Enter the names and phone numbers of your team members in the "Emergency Response Team" section.

Place emergency materials, e.g., floor plans, exit routes, etc. distributed by your response team in the pocket at the end of this guide.

Keep the guide where it will be immediately available for quick reference in an emergency.

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2 UTILITY FAILURE

2.1 MAJOR UTILITY FAILURE

1. NOTIFY SUPERVISOR

Supervisor will contact the Director. The Director's phone number is in operation 24 hours a day, seven days a week.

- 2. IF A SUPERVISOR IS UNAVAILABLE, call ext. 5413 and give a brief, clear description of the problem.
 - 3. REMAIN CALM.
 - 4. FOLLOW DIRECTIONS OF EMERGENCY PERSONNEL.
- 5. If evacuation is directed by emergency personnel, follow their direction, assisting disabled and non-English speaking persons as you exit.
- 6. Department head may call Facilities Management, ext. 5413 for information, regarding scope and expected length of outage.

2.2 UTILITY PROBLEMS

Call Facilities to ext. 3509. General Action Guide:

- a. Gas Leaks: Vacate area.
- b. Ventilation: If smoke or strong burning odors occur, vacate immediately.
- c. Elevator Failure: Push button on elevator intercom. Describe the problem. Remain calm until help arrives.
 - d. Plumbing/Flooding: If personal safety allows, shut off electrical equipment and vacate area.
 - e. Electrical Failure: Call ext. 2320.

DO NOT RE-ENTER AREA/BUILDING UNLESS TOLD IT IS SAFE TO DO SO.

3 HAZARDOUS MATERIAL INCIDENTS

3.1 PERSONNEL EXPOSURES/CONTAMINATION

- 1. Remove exposed/contaminated individual(s) from area, unless it is unsafe to do so because of (1) medical condition victim(s), or (2) potential hazard to rescuer(s).
 - 2. AT ALL TIMES notify Emergency 9-1-1 if immediate medical attention is required.
- 3. If incident occurs during normal working hours, notify EH&S (ext. 3506). If after hours, notify Emergency 9-1-1.
 - 4. Administer First Aid as appropriate.
 - 5. Proceed to nearest emergency eyewash/shower to flush contamination from eyes/skin.
 - 6. Remove any contaminated clothing.
- 7. Stand by to provide information or assistance including MSDS (Material Safety Data Sheets) to emergency response personnel (in cases where they are dispatched).

3.2 CONTAMINATION OF EQUIPMENT/FACILITIES

- 1. Do not attempt any clean up or decontamination procedures alone or without wearing proper protective attire, including appropriate respiratory protection where airborne hazards may exist. (Personnel must be trained and certified before using respiratory protection). Unless the incident is a small spill of a relatively innocuous material, **DO NOT ATTEMPT SPILL CLEAN UP WITHOUT EH&S APPROVAL.**
- 2. Avoid spreading contamination by restricting access to the equipment/area only to individuals who are properly protected and trained to deal with the type of hazard which exists (e.g., radioactive, corrosive, flammable, biological).
- 3. Report details and/or request assistance from EH&S (ext. 3506) if the incident occurs during normal working hours. If the incident occurs after hours, contact RUM Police Emergency 3263 or 9-1-1.
 - 4. If a liquid spill, attempt to contain it by using appropriate absorbent material.
- 5. Attempt to decontaminate the equipment/area using appropriate methods under EH&S direction. If material is radioactive assess radiation levels with appropriate monitoring devices before and after decontamination.
- 6. Stand by to provide information/assistance to emergency response personnel (in cases where they are dispatched).

3.3 RELEASE TO THE ENVIRONMENT (AIR, WATER, SOIL)

- 1. Stop the release, if safe to do so.
- 2. Follow procedures described above for contamination of equipment/facilities.

4 EVACUATION OF DISABLED PERSONS

- 1. In most cases, evacuation will not be necessary or advisable. Do not evacuate unless instructed to do so by emergency personnel, the fire alarm has activated, or danger is imminent.
- 2. All persons should proceed toward a nearest safe emergency exit as instructed by emergency personnel. When a disabled person reaches an obstruction, such as staircase, he/she should request assistance from others in the area.
- 3. If assistance is not immediately available, individuals with impairments should stay in the exit corridor and call for help. If the exit corridor should become dangerous (smoke, fire), proceed into the stairway, if possible, and stay at the stairway landing. Close the door behind you to keep smoke out of the stairway. If the stairway should become unsafe, proceed to a safe area away from smoke and fire, closing doors behind you to isolate the smoke. Call 911 and advise the operator of your situation. If in a room with a window, signal rescuers by waving, or place a sign in the window. Do not open the window unless smoke is entering the room. If possible, place a wet cloth material around and under the door to prevent smoke from entering.
- 4. Persons who cannot speak loudly should carry a whistle or other means of attracting assistance. NOTE: It is suggested that individuals with mobility, visual or hearing impairment(s) prepare for emergency ahead of time by informing their building coordinators, floor warden, co-workers and classmates of the best methods of assistance during an emergency.

4.1 ASSISTING DISABLED PERSONS DURING EMERGENCY EVACUATION:

4.1.1 Non-Ambulatory Persons:

Always consult the person about the following:

- Preferred ways of being removed from wheelchair. Wheelchairs should not be used in stairwell
 if at all possible.
- Whether to extend or move extremities when lifting because of pain, catheter leg bags, spasticity, braces, etc.
- Whether a seat cushion or pad should be brought along with the person if he or she is removed from the chair. Being carried forward or backward on a flight of stairs.
- After-care if removed from the wheel chair (i.e., whether they prefer a stretcher, chair with pad or medical assistance).

4.1.2 Visually Impaired Persons:

- Tell the person the nature of the emergency. Offer to guide him or her to safety.
- As you walk, say where you are and advise of any obstacles.
- When safety is reached, help to orient the person and ask if additional assistance is needed. Do not leave them alone.

4.1.3 Hearing Impaired Persons:

Hearing impaired persons may not hear audible alarms and some buildings do not have visual alarm devices.

Either:

- a. Write a note explaining the nature of the emergency. Include "Go to exit NOW", or
- b. Turn light switch on and off to gain attention, and then indicate through gestures or writing what is happening and what to do.

5 FIRE

ALL EMPLOYEES SHOULD LEARN TO USE EXTINGUISHERS. EH&S (ext. 3506) OFFERS CLASSES.

5.1 IF YOU DISCOVER A FIRE ON YOUR FLOOR:

- 1. Alert and evacuate people in the room.
- 2. Close door after exiting.
- 3. Activate fire alarm
- 4. Notify Emergency 9-1-1. Report your name, department and location of fire. Do not hang up until the call is complete.

5.2 IF TRAPPED IN A ROOM:

- 1. Place cloth material around or under door to prevent smoke from entering.
- 2. Retreat and close as many doors as possible between you and the fire.
- 3. Be prepared to signal from window but do not break glass unless absolutely necessary (outside smoke may be drawn in).

5.3 IF CAUGHT IN SMOKE:

- 1. Drop to hands and knees and crawl.
- 2. Hold breath as much as possible.
- 3. Breathe shallowly through nose and use blouse, shirt or jacket as filter.

5.4 IF FORCED TO ADVANCE THROUGH FLAMES:

- 1. Hold your breath.
- 2. Move quickly.
- 3. Cover head and hair.
- 4. Keep head down and eyes closed as much as possible.

5.5 IF CLOTHING CATCHES FIRE: STOP...DROP...ROLL

Fire Extinguisher Instructions for Waste-Basket-Size Fires:

IMPORTANT NOTES:

- 1. Fire extinguishers can be used on small (waste-basket-size) fires only if safe to do so.
- 2. Be sure you are using the proper extinguisher for the type of fire you are fighting. Read instructions on extinguisher.

P Pull safety pin from handle

A Aim (nozzle, cone, horn) at base of fire.

S Squeeze the trigger handle.

S Sweep from side to side (watch for re-flash).

When a Fire Alarm is Activated:

- 1. Follow emergency personnel directions.
- 2. Walk do not run to the nearest safe exit (remove high heels to avoid tripping). Alarm may not sound continuously. If alarm stops, continue to evacuate.
- 3. Use stairways for exit, do not use elevators. Do not push or crowd, use handrails in stairwells-stay to the right.
 - 4. Give assistance to disabled persons. (See "Evacuation of Disabled").
- 5. Feel doors (top and bottom) for heat use back of your hand. If hot, do not open. If not hot, open door slowly. Stand behind door and to one side; be prepared to close it quickly if fire is present.
 - 6. Notify emergency personnel if you suspect someone may be trapped inside the building.
 - 7. Proceed to assigned evacuation area (at least 300 feet from building).
 - 8. Do not interfere in any way with actions of emergency personnel.

6 EARTHQUAKE

6.1 DURING A MAJOR QUAKE

6.1.1 If Inside:

- 1. STAY THERE!
- 2. Drop, Cover & Hold. If possible, take cover under a sturdy desk or table. Hold on to a furniture leg until the shaking stops. If your work location is adjacent to windows/glass, keep a light-weight hard hat on a hook under your desk. Put it on while you are under your desk.
 - 3. STAY AWAY FROM WINDOWS AND OBJECTS WHICH COULD FALL ON YOU.
 - 4. DO NOT RUN OUTSIDE. Falling debris can cause major injuries.
 - 5. DO NOT USE ELEVATORS.
 - 6. FOLLOW INSTRUCTIONS OF EMERGENCY PERSONNEL.

NOTE: If in a crowded public place, DO NOT RUSH FOR EXITS. Take cover under a sturdy desk, table, or other furniture. If that is not possible, seek cover against an interior wall and protect your head and neck with your arms. Avoid danger spots near windows, hanging objects, mirrors, or shelves where objects may fall on you.

6.1.2 If in an Elevator:

You are probably better protected in an elevator than other places. Elevators will not fall down the shaft and nothing heavy can fall on you.

- 1. If power fails, elevators will stop and lights will go off. Be Patient!
- 2. You will be rescued as soon as possible.
- 3. Follow directions of emergency personnel.

6.1.3 If Outside:

- 1. Quickly get to open area, away from trees, buildings, walls and power lines.
- 2. Drop to your knees in a fetal position with head bending to touch the ground. Close eyes and cross arms over back of head and neck for protection.
 - 3. Stay in that position until the shaking stops.

6.1.4 If in a Vehicle:

- 1. Pull to the right side of road and stop.
- 2. If near overpass, power lines, or structures, proceed away from these risks and then stop.
- 3. Stay inside until shaking stops.

6.2 AFTER THE SHAKING STOPS

6.2.1 If inside a campus building:

- 1. After a major quake, replace telephone handsets which may have fallen off the hook. Limit phone use to true emergencies only.
 - 2. Advise emergency personnel of injured persons they may be unaware of.
 - 3. Assist in evacuation of disabled persons, if appropriate.
 - 4. Follow the procedures in this guide for fire, medical or evacuation safety steps.

- 5. Advise emergency personnel of any impending property damage, e.g., and equipment close to falling on furniture, vital documents getting wet, etc.
 - 6. Assist emergency personnel in immediate actions to limit damages.
 - 7. Time permitting, tune portable radio to Emergency Alert System (EAS).
 - 8. Gather home and office keys, identification and easy-to-carry critical work-in-progress.
 - 9. Follow evacuation instructions of emergency personnel.

6.2.2 If on campus, but not in a building:

- 1. Go to the nearest evacuation assembly area.
- 2. Stay clear of buildings, trees, and falling objects.
- 3. Follow directions of emergency personnel.

6.3 WHEN TO GO HOME

In the event of a major quake, be prepared to stay on campus overnight and perhaps longer. You should not try to get home until campus authorities say it is safe, which will be when the worst fires are under control and streets are cleared for travel. This may happen quickly, or may take some time (72 hours or longer). Do not risk becoming a casualty by acting independently of emergency personnel.

6.3.1 CONTACT WITH LOVED ONES

- 1. Be sure you know the number (or carry it at all times) of your family contact. Pay phones should be operating and local telephone companies plan to supply additional banks of pay phones so you can learn about your loved ones.
- 2. Hot Lines will rapidly be established for your loved ones to learn of your condition. Emergency personnel will give you additional information.

7 MEDICAL EMERGENCIES & FIRST AID

7.1 GENERAL STEPS IN MEDICAL EMERGENCIES

- 1. Call out for emergency personnel trained in First Aid.
- 2. Have someone notify Emergency 9-1-1.
- 3. If immediate action must be taken and no emergency personnel are available, the 911 operator will assist you.
 - 4. Have someone bring you the department first aid kit, if needed.
 - 5. Do not move the victim unless absolutely necessary.

FIRST AID KITS ARE LOCATED IN ALL THE UNDERGRADUATE LABS AND IN THE ADMINISTRATIVE OFFICE.

POISON CONTROL CENTER: 1-800-222-1222

You are encouraged to learn First Aid and CPR. For classes, call The American Red Cross.

7.1.1 EXTERNAL BLEEDING

First Aid Treatment¹ for external bleeding:

When giving first aid for open wounds, it is important to take precautions to protect against the transmission of disease. Always try to use a protective barrier.

- Check the scene to see that it is safe.
- Call 911 if there is severe external bleeding.
- Identify yourself and ask permission to help the victim.
- Calm and reassure the victim.
- Put on rubber gloves if you have them.
- Locate the source of the bleeding.
- Using a sterile dressing or clean cloth, apply direct pressure to the wound.
- Raise the bleeding part above the level of the victim's heart if you do not suspect a fracture and does not cause more pain.
- If bleeding doesn't stop or if you need to free your hands, apply a pressure bandage. Do not remove blood soaked bandages. If blood soaks through, apply additional bandages.
- If bleeding still does not stop, apply pressure to the pressure point.

7.1.2 SHOCK:

Shock is a condition in which the circulatory system (the heart, blood and blood vessels) fails to provide adequate oxygen-rich blood to the body. When vital organs such as the brain, heart and lungs do not receive oxygen-rich blood, they do not function properly. This results in shock. Shock is life threatening.

First Aid Treatment for Shock:

¹ FIRST AID TIPS DERIVED FROM the American Red Cross

- Check the scene to see that it is safe.
- Check victim and what happened.
- Call 911.
- Check victim to see if they are wearing a medical alert tag.
- DO NOT give the victim anything by mouth.
- Check the ABC's. (Airway, Breathing, Circulation)
- Place victim flat and elevate his/her feet 8 to 12 inches.
- Try to maintain body temperature.
- Give first aid for any underlying illness or injury.

7.1.3 CHOKING:

Choking or an airway obstruction occurs when a solid object, fluids, or the back of the tongue blocks the airway. A choking person may quickly stop breathing and lose consciousness.

Signs and Symptoms:

- Partial airway obstruction
- · Victim can cough forcefully.
- Victim may be able to talk.
- Victim may wheeze between breaths.
- Victim may clutch at the throat with one or both hands.

NOTE: Do not interfere with victim's attempt to cough.

- Complete airway obstruction (a partial airway obstruction can quickly become a complete airway obstruction.)
- Victim is unable to speak, breathe or cough.
- Victim may clutch at the throat with one or both hands.

7.2 First Aid Treatment (Adult or child over 1 year old):

- Check the scene to see that it is safe.
- Ask the victim if he/she is choking. If the victim cannot answer, the obstruction is life threatening.
- Call 911. If possible, send someone else to make the call.
- Identify yourself and get consent to help.
- Do not interfere if the victim is coughing forcefully.
- Do not pinch or poke an object that is lodged in the victim's throat.
- Perform abdominal thrusts (if you cannot get your arms around a large victim to give abdominal thrust, or if the victim is noticeably pregnant, use chest thrust.)
- When doing abdominal thrusts, stand behind the victim.
- Wrap your arms around the victim's waist (for chest thrusts, move your arms and hands higher up on the victim's chest with your arms under victim's armpits.)
- Make a fist. Place the thumb side of your fist in the middle of the victim's abdomen, just above
 the navel and well below the tip of the breastbone.
- Grasp your fist with your other hand.
- Keeping your elbow out, press your fist with a quick, upward thrust into the victim's abdomen. Each thrust is a separate attempt to clear the airway.
- Continue performing this maneuver until the obstruction is cleared or the victim loses consciousness.

7.2.1 If victim becomes unconscious:

- Position victim on back.
- Clear the victim's airway, if necessary.
- Attempt to ventilate.
 - Use the head-tilt/chin-lift method.
 - o If unsuccessful on first try, reposition to open airway and try again. 13
- If you still cannot ventilate, do abdominal thrusts.
 - Straddle the victim's thighs.
 - Place the heel of one of your hands against the middle of the victim's abdomen, just above the navel and well below the lower tip of the breastbone.
 - Place your other hand on top of your first hand.
 - o Give up to 5 quick inward and upward thrusts.
 - Check the victim's mouth and do a finger sweep to remove the object if it has been dislodged.
 - o If breathing has not been restored, open airway and attempt to give 2 more breaths.
 - If breaths won't go in, give another series of up to 5 thrusts, check victim's mouth, and give 2 slow breaths.
 - Continue this sequence of thrusts, checking the mouth and breaths until object is dislodged or medical help arrives.
 - o If breathing is restored, monitor victim until medical help arrives.
- If airway becomes open but victim is not breathing, start rescue breathing.

7.2.2 RESCUE BREATHING

First Aid Treatment for rescue breathing:

- Check the scene to see that it is safe.
- Check victim for consciousness and shout for help.
- Call 911. If possible, send someone else to make the call.
- Start ABC's.
 - A=Airway, open airway Use the head-tilt/chin-lift method (if you suspect a neck injury, use modified jaw-thrust technique Check for breathing for 3 to 5 seconds.
 - B=Breathing If victim is not breathing, give 2 slow breaths 1 to 1-1/2 seconds each.
 - If necessary, clean airway.
 - C=Circulation Check for 5 to 10 seconds to see if victim has a pulse. NOTE: Give rescue breathing at the following rates: Adult one breath every 5 seconds (12 per minute) Infant/Child one breath every 3 seconds (20 per minute)

NOTE: For an infant (birth to 1 year old) place one hand on infant's forehead, then place one finger (not your thumb of the other hand under the bony part of the baby's chin. To give breaths, tightly seal your lips around the baby's mouth and nose. Give two slow breaths until chest gently rises. Check for infant's pulse on inside of the upper arm, between the infants elbow and shoulder.

Check for pulse and breathing every minute.

Stop rescue breathing if:

- Victim starts breathing on his/her own.
- You are relieved by a medical professional.
- You are relieved by another trained rescuer.
- You can no longer continue.

8 EMERGENCY RESPONSE TEAMS

- 1. Dr. Ricky Valentín Building Coordinator and Zone Captain
- 2. Dr. Pedro Quintero Alternate Building Coordinator and Zone Captain

Building Evacuation Team

- Dr. Lourdes Rosario Evacuation Manufacturing Lab.
- Mr. Pedro A. Velásquez Evacuation Mechatronic Lab, boiler room & basement.
- Mr. Morthimer Ortiz Evacuation of Special Projects CID.
- Mr. Ernesto Morales Evacuation Thermal Science Lab & 1st floor research labs.
- Mrs. Jessamine Hernández Evacuation of the Materials Lab & 2nd floor classrooms.
- Mrs. Catalina Camacho Evacuation of Computer Labs.
- Mrs. Yolanda Pérez Evacuation of Graduate and Undergraduate Study Rooms.
- Mrs. Rosa H. Quiles Evacuation of Administrative Offices
- Professors Evacuation of offices and research labs.

PRIMARY EVACUATION ASSEMBLY AREA: Front of ROTC Building

SECONDARY EVACUATION ASSEMBLY AREA: Old Track & Field

NO MEMBER OF THE FACULTY, STAFF OR STUDENT BODY SHOULD ATTEMPT RE-ENTRY INTO ANY CAMPUS BUILDING UNTIL GIVEN THE O.K. BY RUM EMERGENCY PERSONNEL.

After a major disaster, RUM will activate its emergency information telephone line. Information regarding the status of the campus, employees and students will be available through this number.

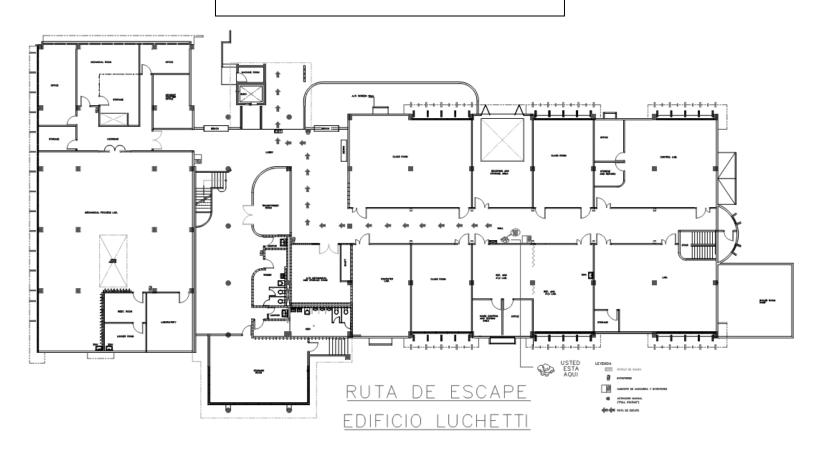
CALL 911 IF YOU HAVE A FIRE, MEDICAL OR POLICE EMERGENCY REQUIRING IMMEDIATE ATTENTION.

9 ESCAPE ROUTES	
	12

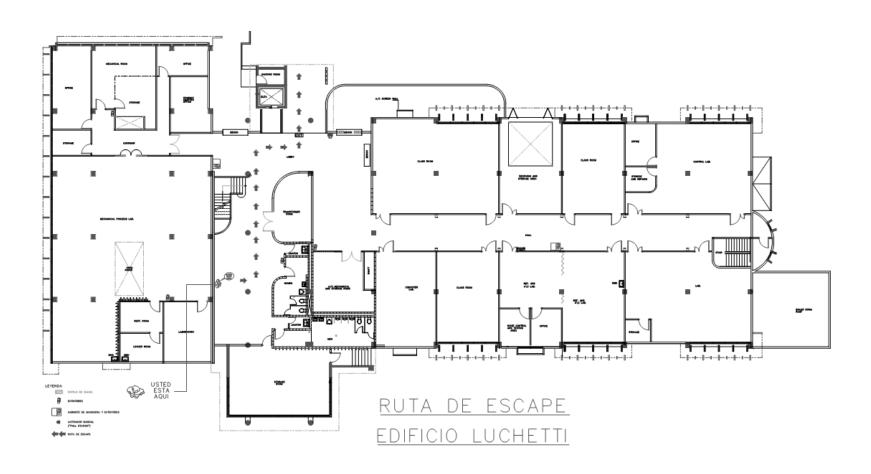
Manufacturing Hallway



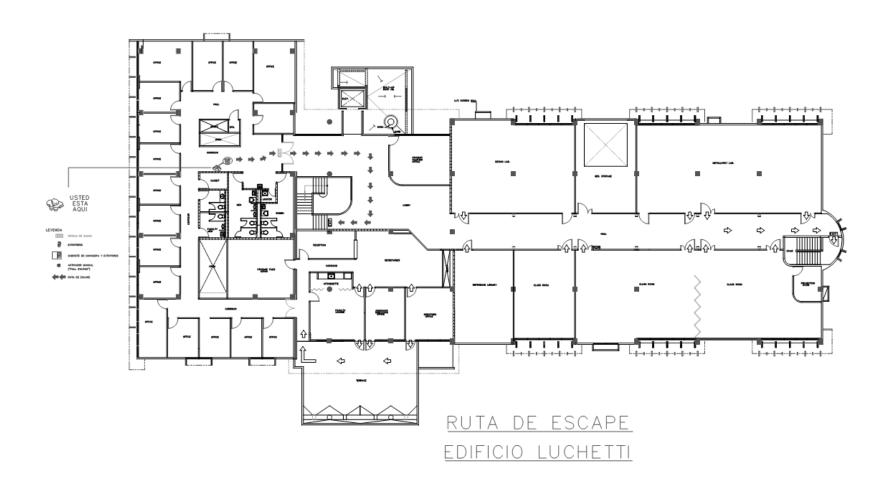
First Floor Lab Hallway



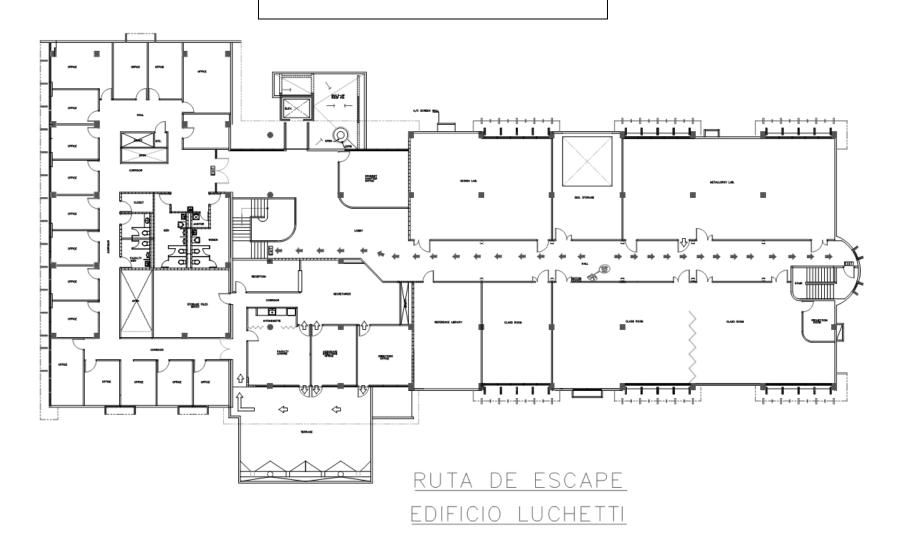
Front of Study room



Professors' Offices



Classrooms 2nd Floor



Professors' offices 2

