

جامعــة العـلـوم والتـقنـيــة في الفــجيـرة UNIVERSITY OF SCIENCE & TECHNOLOGY OF FUJAIRAH

# USTF Occupational Environment Health & Safety Manual









رئيس دولية الإمارات العربية المتحدة

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# 1.0 Preface

#### **1.1 Introduction**

University of Science and Technology of Fujairah establishes and maintains safe working conditions for promoting safe work practices for the employees, faculty staff and students.

University of Science and Technology of Fujairah recognizes its responsibility to provide a safe working environment. This includes making reasonable efforts to promptly investigate and address safety issues, not requiring employees to perform tasks that are dangerous to their health and safety without adequate training and safety equipment as determined by laws and regulations applied in the UAE, and making information on hazardous materials readily accessible to prevent illness and injury through observation of applicable safety regulations.

Prevention of hazards will always be preferable to protection from hazards, and part of our safety focus is to eliminate hazards rather than require employee personal protection.

The material - information - contained in this manual has been compiled from refereed scientific references, and regulations approved by the Ministry of Education in the UAE and prestigious global destinations.

They represent the best references in this field. Issuing this manual aims to be a starting point to achieve the highest standards of occupational safety and health in the work environment. And it does not aim to specify minimum legal means but to provide necessary information to prevent accidents.

#### **1.2** Policy

It is the policy of the University of Science and Technology of Fujairah to prevent and minimize, fully practical, all risks to the safety and well-being of employees and the public while at its premises University of Science and Technology of Fujairah employees, property, and the environment will be safe guarded by implementing an effective safety program.

The University of Science and Technology of Fujairah programs and activities will be in line with requirements of safety and environmental regulations applied in the UAE.

All activities performed at University of Science and Technology of Fujairah will be conducted in accordance with procedures outlined in these safety procedures. The provisions of this procedure apply to all areas under University of Science and Technology of Fujairah control or direction, including permanent sites and leased facilities.



This procedure establishes policies for most laboratory and non-laboratory operations. All specific situations are dealt in accordance with the rules applied in the UAE and the following important general principles:

- 1. That the worksites of all employees of USTF Colleges and Offices are safe, healthy, considerate and adhering to the framework's guidelines provided in this manual
- 2. Ensure the USTF OESH System's effectiveness and work stages (planning, implementation, examination and auditing, improvement) based on standards and regulations and best global practices.
- 3. Developing the systems and procedures of the USTF Colleges and Offices to face occupational health and safety risks in the work environment
- 4. Maintain excellence in occupational health and safety through innovative practices and continuous improvement of all USTF workers and dealers.
- 5. Smoking is strictly prohibited in the whole campus of the university. The information in the safety shall be readily available in all work areas for all employees.

# 2.0 Occupational Safety and Health Culture in the Workplace

#### 2.1 Introduction

University of Science and Technology of Fujairah launching this manual is in line with the Occupational Health and Safety Guidelines in the UAE

One of its most important priorities is preserving the safety and health of humans in its different groups (Faculty members, employees, students, and visitors), and the achievement of a safe work environment that supports excellence environment.

The university has adopted an effective Occupational Environment Safety and Health management system that achieves compliance with the regulations approved by competent bodies in the UAE and benefiting from global experiences in this field.

Each member of the university's employees, students, or visitors has specific responsibilities that achieve the desired goals to reduce the sources of risk, and to prevent accidents of all levels.

The university's keenness to spread a culture of safety and occupational health in its society results in the promotion of basic precautionary behaviors and habits, so that safety is an integral part of all activities

In the USTF Occupational Environment safety and health Manual as part of this culture, all university members must understand the importance of limiting the risks of exposure to sources of trouble in the work environment.



#### 2.2 Occupational health and safety culture in the workplace

The definition of a safety culture shows that a culture of safety and occupational health is a collective commitment for the University's individuals of all classes and levels, and that occupational safety and health is a top priority.

Whereas, the university culture is a consequence of achieving several elements that can be detailed in the attitudes, behaviors, values, beliefs, and methods of work performance and several characteristics that people share.

Since occupational safety and health are a positive value if achieved, it prevents injuries, saves lives, and improves productivity and outcomes. When exercising safety and occupational health effectively and considering it an important matter, it gives a feeling of confidence and concern to all university employees.

To achieve dissemination Safety and occupational health Culture in the work environment must be confirmed the following:

- 1. The comprehensiveness of risk management plans
- 2. Clarity of tasks and responsibilities
- 3. Self and Institutional Control.
- 4. Continuous improvement
- 5. Easy communication

# 2.3 Leadership and management of occupational health and safety in the workplace

The application of the occupational safety and health management system in the work environment requires the provision of rules and conditions:

- Compulsory occupational safety and health,
- Training and awareness programs,
- Continuous evaluation and monitoring, and
- Employee commitment

University members adopt a reliable occupational health and safety culture to ensure the achievement of a safe work environment, and the OESH management system is well prepared.



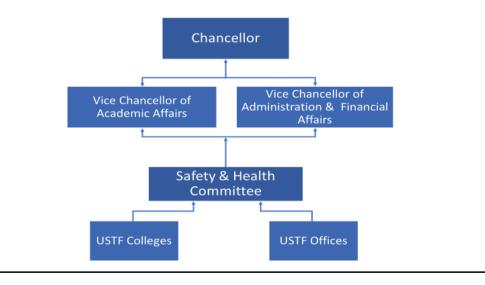
Whereas, occupational environment safety and health is a regulatory and legislative requirement in the first place, which requires that the responsibilities and duties are connected, starting from the university higher management to the bottom level of the university. The direct responsibility for implementing the safety and health management system rests with the Committee of the Safety and Health in terms of clarifying the procedures and processes related to occupational safety and health systems and activating the methods of institutional evaluation, and the provision of easy and fast means of communication and advisory services.

USTF adhere to the requirements and rules of occupational environment safety and health in restricting the university's affiliates, visitors, suppliers, deans, officers, faculty members, staff, and students responsible for promoting a culture of safety.

# 2.0 Health and Safety Management System in the Workplace

#### 3.1 The main elements of the operating model

- 1. USTF formulate a safety and health committee to assume the application responsibility of work stages according to specific roles and responsibilities.
- 2. The various Colleges and Offices in USTF are required to cooperate with the Safety and Health Committee as specified in the following diagram



3. Reports are submitted to Vice Chancellor for Academic Affairs and Vice Chancellor for Administrative and Financial Affairs, through the of the SH Committee Chair. VCFA, and VCAFA, in turn, raises reports to the University Chancellor.



#### 3.2 Implementation mechanism

The implementation mechanism is based on raising awareness of occupational health and safety issues to build employees' capabilities and competencies towards optimal implementation to achieve excellence and sustainability. It consists of the following elements, as shown in the implementation mechanism diagram.



#### 1. Create a culture:

- Raise awareness of the importance of occupational health and safety: educating all employees of the USTF about the importance of health and occupational safety and safe work practices through workshops and training programs
- Behavior and culture: directing all Colleges, and Offices employees towards the importance of awareness and implementing procedures that would support the culture of occupational health and safety in the work environment.

#### 2. Matching:

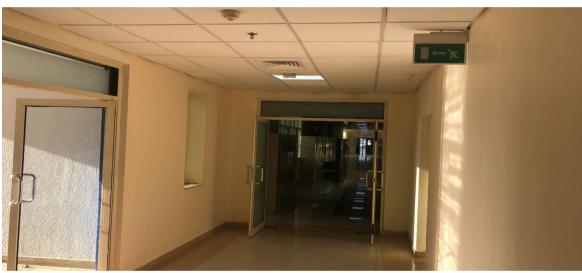
- Inspection / Auditing: All work sites within the USTF must be subject to periodical inspection and auditing processes to ensure its compliance with the Occupational Health and Safety Policy and Procedures
- Manual review: The best application of this manual requires USTF units to review and raising performance indicators according to the UAE Regulations and Best global standards and practice



- 3. Excellence:
  - Development of innovative practices: Encouraging all employees within the USTF units to work on continuous improvement and the development of occupational health and safety practices
  - Continuous improvement: monitoring the manual's safety procedures implementation and reviewing them to ensure their effectiveness following global standards and practices

#### 3.3 Safety procedure

• The university was built in accordance with the Civil Defense Department of Fujairah, UAE regulations and satisfies all safety requirements regarding; number of entrances, exits, automatic sprinklers and complete alarm system.



USTF has illuminated 'Emergency Exit' signs on all its emergency exits.

Photo 1: Shows USTF has illuminated 'Emergency Exit' signs



Photo 2: Shows USTF has illuminated 'Emergency Exit' signs



- All USTF emergency exits are accessible and obstruction-free and exit doors are unlocked and can be opened using push bar operations.
- Train employees and students about building evacuation in case of hazardous situations each semester. SANID, The National Emergency Response Program, which is equivalent to American CERT program, is conducted in the college two times a year to train students about the necessary actions in case of emergencies. See Appendix No. 6
- The university has also established one clinic looking for the safety and health welfare of personnel of all USTF members. They receive accident and incident statistics and initiate action on the findings.
- Fire extinguishers are available in enough numbers in campus. 44 fire extinguishers and 24 fire hose distributed all around the campus according to Civil Defense Specifications. In addition to that, there is a fire detector and fire sprinklers in each laboratory and classroom. Emergency washing setup is fitted in each lab and compose of two parts: whole body wash and eyewash checked and approved by Department of Civil Defense-Fujairah **See Appendix** 7
- Enough numbers of securities and services personnel. Two outdoor and Fifteen indoor are present in rotation all the time to observe and maintain discipline of the entire campus.



• USTF electrical rooms maintained with operational fire extinguishers.

Photo 3: Shows USTF electrical rooms maintained with operational fire extinguishers



- USTF electrical rooms maintained with operational alarms.
- USTF electrical rooms and electric boxes have a displayed hazard warning sign.



Photo 4: Shows USTF electrical rooms and electric boxes have a displayed hazard warning sign

- USTF has enough numbers of authorized personnel to access the electrical rooms and electric boxes and utilizes access controls to prevent unauthorized access
- USTF maintain safe and secure electrical connections.



Photo 5: Shows USTF maintain safe and secure electrical connections



- USTF maintain safe and secure electrical sockets.
- Increase the understanding and awareness by all employees and students of safety hazards associated with their jobs which will enable employees to recognize hazardous or dangerous conditions.
- Health insurance covered all employees of University of Science and Technology of Fujairah. Students are covered by the medical insurance cards of UAE-MOHAP.
- Laboratories and non-laboratories area are kept clean and dry all the time.
- USTF has up-to-date, approved records of its emergency procedure tests.
- USTF perform and maintain up-to-date records of its emergency drills;
  - o Internally each semester See appendix No. 6
  - Annually with the Civil Defense. See appendix No. 8
- USTF has an up-to-date and approved Critical Incident Emergency Plan. See appendix No. 1
- USTF is committed that to display signage to alert the campus community of potential dangers and risks relating to;
  - i. Emergencies (including fire)
  - ii. Cleaning
  - iii. Smoking
  - iv. Safety procedures (including specialized laboratories, clinics, equipment/tools). See Appendix No. 9
- USTF provides all necessary, enough areas allocate for the designated parking spaces for;
  - v. Buses
  - vi. Cars
  - vii. People of determination.



Photo 6: Shows USTF allocate for the designated parking spaces for buses, cars, and people of determination



• All USTF buses maintain fully operational fire extinguishers.



Photo 7: Shows all USTF buses maintain fully operational fire extinguishers

• USTF auditorium has additional emergency exit behind the stage.



Photo 8: Shows USTF auditorium has additional emergency exit behind the stage

• USTF always assures that all campus corridors are free from obstructions



Photo 9: Shows USTF always assures that all campus corridors are free from obstructions

• USTF gymnasium maintain fully stocked first aid boxes.



Photo 10: Shows USTF gymnasium maintain fully stocked first aid boxes



- All USTF IT server rooms have a fully operational fire extinguisher/ suppression system. See Appendix No. 10
- Access to-and the integrity of all USTF external and internal areas are maintained.



Photo 11: Shows access to-and the integrity of all USTF external and internal areas are maintained

• All USTF computer labs have fire extinguishers (CO2).



Photo 12: Shows all USTF computer labs have fire extinguishers (CO2).

• USTF maintain an easily enough accessed emergency exits fitted with illuminated signs at exits/emergency doors



**Photo 13:** Shows USTF maintain an easily enough accessed emergency exits fitted with illuminated signs at exits/emergency doors



• Fire extinguishers are available in the learning resource center (LRC).



**Photo 14:** Shows fire extinguishers are available in the learning resource center (LRC)

#### **3.4 Laboratories**

#### **3.4.1** Laboratories instructions

All laboratories are constructed according to safety regulation and are equipped, according to needs, with:

- Enough suction for air ventilation
- Fire extinguishers are available in enough numbers
- Refrigerator for unstable chemicals
- Shower and eye wash fountains
- Exit for emergency
- Goggles, gloves, nose and mouth filter are available for use.

#### **3.4.2** General Consideration for Safety in the laboratory

3.4.2.1. Recommended behavior in the labs

- The first practical, in each lab, shall cover safety measures that students should strictly follow throughout the semester.
- To ensure that students have understood the given introduction in lab safety, the instructor may randomly ask student about safety measures.
- Working spaces, tables and test tubes must be cleaned before leaving the lab. In addition, gas pipes and running water should be closed.
- Using only 2-3 ml of the liquid chemicals or very little amount of powdered chemicals while conducting experiments is enough for positive results. Do not use excessive amount of chemicals endangering yourself, your colleagues, the environment and wasting the materials.
- When working with chemicals that evolve toxic or irritant vapors a fume cupboard, must be used.
- Experiments can be done in groups of maximums of three, to ensure that everybody sees all the results, takes notes, and to assure least susceptibility for hazardous exposures.
- After finishing one group of experiments, the students must be sure that all their glassware and equipment are kept clean before starting the following experiments.



#### 3.4.2.2. Safety in the Laboratory

#### • Basic Principles in Laboratory work:

- Before dealing with chemicals, make sure to check all safety.
- Measures concerning poisonous or dangerous properties.
- Storing dangerous materials in containers resembling to those of foodstuff should be avoided.
- Store very poisonous materials at closed places
- $\circ\;$  All containers have to be labeled indicating the name and properties of the chemicals inside
- Avoid inhaling and any contact of dangerous chemicals with skin, nose, mouth or eyes. Working with dangerous chemicals is only allowed in the hood
- Working in the lab is only allowed with goggles and laboratory coat
- Taking food, drinking and smoking are strictly prohibited in the laboratory.
- Keeping the working space on the bench and the whole laboratory clear is strongly recommended
- When working with chemicals, which evolve toxic or irritant, vapors a fume cupboard has to be used.

#### • Safety Precautions

- All accidents, which occur in the laboratory, must be reported to the person in charge immediately.
- Protective clothing must be worn in the laboratory but should always be removed after leaving the premises.
- Personal clothing should be suited to the nature of work
- The wearing of jewelers should be limited to a minimum and care should be taken to ensure that acids or other chemicals do not interact with rings and other ornaments.
- Examine all glassware before use, wash all the equipment thoroughly with detergent solution, rinse it with tap water and finally rinse it with distilled water. All equipment must be clean otherwise traces of impurities interfere with many analyses.
- $\circ$  When pipetting, always pay attention to the mouthpiece of pipettes and use a teat, never the mouth.
- Glassware with damaged edges should not be used. Examine carefully for any defects on all flasks, beakers and other containers in which acids or alkalis are to be dissolved and reject those with the slightest faulty.
- Discard all broken glass into a bucket reserved for the purpose and not in the wastepaper basket
- Do not clutter up the sink with dirty glassware, in the event of an accident you may wish to use the sink quickly.
- After using strong acids and alkalis, be sure to wipe the neck of the bottle before returning to the shelf
- Always replace reagent bottles on the shelves and never leave bottles of acids or alkalis where they be overturned
- Neutralize immediately all acids with alkalis that are split. All bottles must be clearly labeled to show their contents.



- Put away all sharp-edged instruments as soon as they are not required.
- Always wash your hands with soap and water after handling chemicals before leaving the laboratory; the use of gloves is recommended.
- Always close the doors of the laboratory and the windows of the fume-cupboards. Do not use fume-cupboards, which are out of order.
- Storage of chemicals:
- Excise officials and laboratory personnel have to inspect periodically the stock.
- Acids must be kept in glass-stoppered bottles preferably in a dip tray.
- Ammonia must be kept tightly stoppered and away from heat and other chemicals
- $\circ$   $\;$  Bromine ampoules must be stored in absorbent material.
- Cyanide and all other poisonous chemicals must be clearly marked "poison" in red letters and kept locked in a poisons cupboard; details of all poisons issued should be entered in a poison record book
- Deliquescent and hygroscopic chemicals must be stored in airtight containers. Such chemical includes potassium, sodium hydroxide, sodium carbonate, phenol and phosphorous pentoxide
- Ether must be kept in a glass bottle, stoppered with a waxed lined back elite screw top. Never use a rubbing bung, as ether attacks rubber, and never store in a refrigerator
- Hydrogen fluoride attacks glass and must be stored in a polythene bottle.
- Hydrogen peroxide must be kept in a brown glass bottle in a refrigerator. Exposure to warmth or light causes oxygen to be evolved and a pressure sufficient to cause the bottle to explode may be built up.
- Flammable liquids:
- Keep well stoppered in a metal container clearly marked "flammable."
- Stocks of such fluids should be kept in a store used solely for this purpose. This storeroom should have a sunken floor so that in the event of breakages no liquid will flow from the room.
- Keep the bottles as cool as possible; never use the liquids near a naked flame
- Iodine must be kept in a brown glass bottle with a glass stopper. Rubber bungs are attached by iodine, so never use rubber bungs
- Potassium hydroxide should be stored in bottles waxed on the inside as it attacks glass, forming sodium silicate. Glass stoppers must never be used, as the CO2 in the air combines with NaOH, forming Na2CO3, which acts as cement, firmly fixing the stopper into position. The solution in daily use should be stored in an aspirator. A soda-lime guard tube will absorb and prevent any CO2 from entering the aspirator.
- Potassium permanganate must be stored in a dark glass-stoppered bottle, as it decomposes when exposed to light.
- Sodium hydroxide solution (see potassium hydroxide)
- Sodium must never be allowed to come into contact with water, as a spontaneous combustion will result. Keep completely covered with ligroin, naphtha or xylene
- Silver nitrate solution must be kept in a dark, glass-stoppered bottle. Exposure to light decomposes the silver nitrate to silver oxide
- Sodium nitroprusside must be stored in a dark, glass-stoppered bottle, as it decomposes upon exposure to light.
- Precautions against fire



- When working with highly flammable chemicals in the laboratory the danger of fire should be always kept in mind and adequate precautions taken:
- Flammable chemicals: Benzene, xylene, toluene, acetone, ether, alcohol, and carbon disulfide.
- The greater fire hazard is from the vapor given off from the chemical
- All flammable chemicals must be securely stoppered when not in use.
- $\circ~$  When working with flammable chemicals all naked flames in the near vicinity should be extinguished
- $\circ\,$  A waste bottle should be kept in all laboratories for discarding flammable chemicals
- Recovered solvents should be poured into these special bottles and they should not be poured down the sink
- When full, the contents of the waste bottle may be disposed of in a safe place.
- On no account smoke when handling flammable chemicals.
- Volatile solvents must be removed by distillation and not by evaporation. Do not heat any inflammable liquid in an open vessel over a free flame.
- Fire emergency measures in general:
- $\circ$   $\,$  Sound the alarm  $\,$
- Evacuate from the immediate vicinity of the fire
- $\circ$   $\,$  Close all doors and windows
- o Turn off all gas and electrical appliances
- Attack the fire if possible, with the appliances available but without taking personal risk
- Inform immediately laboratory staff members.
- Be familiar with the location of and use of:
  - Alarm
  - All appliances of gas and electricity
  - Fire apparatus
  - Telephones and telephone numbers to dial
- $\circ~$  Do not use water for burning oil or organic solvents Instead use mixture of sand and sodium bicarbonate
- o Fire apparatus
  - Fire Extinguishers:
    - 44 fire extinguishers
  - Alarm system connected with fire and smoke detectors all are checked regularly.
    - In every classroom and laboratory:
  - Automatic sprinklers:
    - In every classroom and laboratory in sufficient quantity per area.
  - Fire hoses:
    - 24 Fire hoses in addition to Water and Sand buckets

#### **3.4.3** Chemistry Laboratories:

• Appropriate instructions are issued, proper signs are posted, and adequate information is provided to employees working in areas where chemical hazards exist. All chemicals have appropriate labels with clear marking of the type of



hazard they entail. These labels indicate a chemical's identity, the manufacturer, information on the hazards of the chemical and protective measures.

- Adequate training is provided to employees in the safe handling, transportation, and storage of hazardous chemicals and flammable solvents.
- All hazardous chemicals and flammable solvents are transported, handled and stored safely.
- All chemical wastes are disposed of safely.
- Necessary safety equipment (e.g., approved solvent storage cabinets, waste disposal container, etc.) is available and properly used.
- $\circ\;$  Appropriate safety hoods and fume cupboards with adequate ventilation are provided and maintained.
- Safety personal protection clothing and equipment such as goggles and masks are used by personnel dealing with hazardous chemicals.
- $\circ\,$  Showers and eyewash fountains are provided where chemical splashes are possible.
- None of the activities on USTF premises involves radioactive materials and, in a sense, all workplaces are free from radiation sources of the radioactive nature.
- USTF is committed to prevent, risks to human health arising from activities involving biological materials and set appropriate rules for control of those risks. Activities involve the handling, use, transport and storage of biological materials which are defined as any microorganism, cell culture, parasite, human or animal tissues (including blood, urine and other body products) or plant materials, which may cause infection, allergy, toxicity or other risks to human health.
- USTF usually select the safe biological materials, which is not dangerous for the student activities; Students are not provided with any microorganism, known to be dangerous like, the causative of cholera, typhoid, diphtheria, brucella, etc. Microbiology laboratories are equipped with Laminar flow and an autoclave for sterility to prevent infections.

#### 3.5 Students

Students are not employed persons and hence many safety provisions may not apply to them. Equally, they are not bound by the duties of employees. However, University of Science and Technology of Fujairah owes them a general duty of care and in practice treats them as if they were employees. It is important therefore to ensure that:

- Students abide by the general safety rules and instructions provided by University of Science and Technology of Fujairah.
- Students are given full instructions in safety matters relating to the normal functioning in laboratories and workshops and asked to follow the instructions of laboratory safety manual. They would be monitored by supervisors and instructors.
- Students are required to report on any accidents, or any potentially hazardous condition observed which could cause danger to personnel and property.
- Students should refrain from acts that could be hazardous.
- No admission to laboratories without wearing the lab coats



• Two female service providers and female advisor are available in female side of the campus. Additionally, main entrances are monitored by two female employees to help secure students' movements

### 3.6 First Aid

- First aid training program courses by SANID were held to train the university students, employees, staff member and personnel in first aid on regular bases.
- First-aid personals at hand in two clinic all times, when the nature of hazard associated with the workplace, calls for their phone numbers.
- First Aid boxes are provided and accessible to employees in an appropriate place. They include items needed to provide first aid, such as, plasters, disinfectant, cotton wool, bandages, sling, analgesic tablets, eye pads, gauze, forceps, thermometers, and clinics phone e number etc.
- The first-aid boxes are checked each month and the missing stock is replaced.
- General behavior concerning first-aid:
- While trying to help first consider own safety!
- Call immediately persons in charge, phone for ambulance if necessary.
- Rescue injured persons by taking them out of the danger zone to a place with fresh air supply.
- Extinguish fire, especially fire on clothing.
- Clothing exposed to chemicals should be removed immediately, if necessary remove the soiled parts fully, when there is contact to skin. Wash the skin with water and soap, for substances, which cannot be removed by water (immiscible) use Polyethylenglykolen (BASF or Roticlean E from Roth company). After removing wash again with water and soap.
- Check breathing and blood pressure and continue controlling
- When injured person is conscious, position the legs 10cm above the position of the heart.
- When injured person fainted move the body in a stable side position, if necessary, begin to give artificial respiration.
- Do not leave injured person alone until help arrives.
- Inform the doctor about the chemicals, which caused injury and keep the vomited material.



#### **3.7** Behavior in dangerous situations

When dangerous situations like fire, pouring out of hazardous liquids, evolving of poisonous gases, explosions or combustions, the following instructions should be applied

- Keeping cool and avoiding hasty and rush acts
- Endangered persons should be calmly asked to leave the room
- End all endangered operations/reaction processes, turn off all gas, electric and water appliances (water needed for cooling reaction processes should not be turned off)
- Inform immediately laboratory staff and/or persons in charge
- If necessary, inform the person in charge to consult doctor at the university clinic, for being exposed to poisonous chemicals
- Persons in charge should immediately write a report about the accident and handed over to the university safety committee as represented by the university safety officer.

#### Immediate treatment of accidents

All following procedures are only emergency measures and must be followed immediately by adequate treatment:

#### • General treatment of superficial wounds:

- If a limb is involved, raise it to reduce bleeding
- $\circ$   $\,$  To arrest the flow of blood, apply digital pressure with a clean dressing to the wound
- Fragments of glass should be left unless they can be easily removed with a sterile dressing
- o Blood clots, which form, should not be disturbed
- Place a sterile, dry dressing over the wound and if the bleeding is profuse, back the dressing with cotton wool. Bandage firmly into position and obtain further treatment
- If cut is minor; allow to bleed for a few seconds, then see that no glass remains then apply disinfectant and bandage

#### • General treatment of burns and scalds

#### • Dry burns and scalds:

- Pain produced by burns may be reduced by immersing in cold water as soon as possible or applying a cold compress
- Burn dressings such as tannic acid, should not be applied without doctor's supervision

#### • Chemical Burns:

- Dab away as much as possible of the chemical and bathe with water and continue with the following:
  - Acids:

Sprinkle powdered sodium bicarbonate over the site of injury or use saturated sodium bicarbonate solution and finally wash again with water (In case of Eye accident: If acid splashes into the eye, wash with water from a water bottle and bathe with 5% sodium bicarbonate in an eye bath)



#### Alkalis:

Sprinkle powdered boracic acid over the affected area or when possible wash with 1% acetic acid and finally with water. (In case of Eye accident: Immediately wash with water, then/or with 1% acetic acid or 1% boric acid).

#### - Bromine:

Wash the affected part immediately with a liberal supply of light petroleum then rub glycerin well into the skin. Then after a while remove the glycerine and apply acriflavine jelly or appropriate ointment. (In case of Eye accident: wash thoroughly with water then immediately with 1% sodium bicarbonate solution.

#### - Sodium:

Remove small-solidified fragment of sodium carefully with forceps from the skin and wash thoroughly with water, then with 1% acetic acid, finally cover with gauze soaked in olive oil.

#### - Phosphorous on the skin:

Wash well with cold water and treat with 1% silver nitrate solution.

#### - Methylsulphate:

Wash immediately and liberally with concentrated ammonia solution and rub gently with cotton wool soaked in concentrated ammonia solution.

#### - Organic substance:

Wash freely with rectified spirit, then with soap and warm water

#### • Ingestion Poisoning:

When accidental poison ingestion occurs;

- Call immediately a doctor
- Meanwhile give an antidote:
  - Acids:

Dilute by drinking much water then followed by limewater or milk of magnesia.

- Alkalis:

Dilute by drinking much water followed by vinegar, lemon or orange juice or lactic acid solution. Also, very dilute acetic acid should be administered and then possibly milk.

#### - Salts of heavy metals:

Drink milk or white of an egg



#### Arsenic or mercury compound:

Give one tablespoon full of salt or zinc sulphate in warm water immediately

 Vomiting should not be encouraged. If not yet swallowed; spit out immediately and wash thoroughly with water

#### • Gas poisoning:

In case of inhaling poisonous gases;

- $\circ$   $\;$  Remove the victim to open air  $\;$
- Loose clothing at neck
- Inhale ammonia vapor or gargle with sodium bicarbonate solution (Note that if chlorine or bromine fumes, inhale only small amounts)
- $\circ\;$  Drinking warm water with peppermint or cinnamon extract to soothe the throat and lungs.
- o If breathing has stopped, apply carefully artificial respiration

#### • Electric shock

In case of electric shock;

- Switch off the power at once
- if patient unconscious sends for medical assistance immediately and if necessary, apply artificial respiration

#### 3.8 Accident investigation

Accident investigation is an important part of any safety program. All accidents must be investigated by service personals for the purpose of preventing future similar accidents. Before an accident can be investigated, it is reported; therefore, service personal report accident to the appropriate supervisor, even the "near miss" incidents that could have resulted in injury or property damage.

Accident investigations do not place blame nor find fault. Information are available regarding the procedures of accident investigations, including how an accident investigation is processed, the employee's role in reporting accidents, and the employee's role in an accident investigation.

Service personal, giving details of the accident, type of hazard, the outcome of the accident, personnel involved, the time of the accident and the causes.

Records of all accidents are kept. The investigation outcome helps in the reassessing of risks and developing safety procedures.



#### 3.9 Purchases

Purchases procedures developed and implemented to ensure that:

- 1. Compliance with the requirements of occupational safety and health for the USTF are specified and combined within the purchase and rent specifications.
- 2. Occupational safety and health requirements should be identified before purchasing goods and providing services.
- 3. The arrangements made to achieve conformity with the requirements must be clear and specific before using the goods and materials supplied.

#### 3.10 Contracting

Occupational Safety and health requirements must be clearly and publicly defined for individuals with interest, and it applies to contractors and their workers, and these requirements should be:

- 1. Occupational safety and health requirement should be included in the procedures for the evaluation and selection of contractors.
- 2. Effective and continuous communication and coordination between the university's appropriate levels and contractors before the commencement of work should be maintained.
- 3. The legislative requirements, the mechanism for reporting risks and the measures prevention and control should be considered
- 4. It includes procedures for reporting injuries, occupational diseases, and accidents in the work environment.
- 5. Provide awareness and training about the risks to workers' safety and health to contractors or their workers before starting and during work, if necessary.
- 6. Regularly assesses the performance of occupational safety and health services in contractor activities in the workplace.
- 7. Ensure that contractors follow occupational safety and health procedures and precautions in the workplace.

#### **3.11** Accessibility for people of determination

USTF commits that the culture of inclusive access for the disabled in the work environment is a logical extension of it is Core Value and included in the USTF occupational safety and health manual. Therefore, the university adopts a comprehensive guide of The National Project for Inclusion of People with Special Needs in UAE, which was launched in 2008, as an engineering reference in its facilities' engineering design and preparing the study and work environment for its affiliates.



# 4.0 | Managing risks in the workplace

#### 4.1 Introduction

USTF commits that the culture of inclusive access for the disabled in the work environment is a logical extension of it is Core Value and included in the USTF occupational safety and health manual. Therefore, the university adopts a comprehensive guide of The National Project for Inclusion of People with Special Needs in UAE which was launched in 2008, as an engineering reference in the engineering design of its facilities and the preparation of the study and work environment for its affiliates.

Therefore, USTF seeks to reduce risks to which people are exposed in the workplace. All its bodies work in harmony and cooperation to create a safe learning environment, ensure that risks are identified and appropriately assessed, and take the necessary preventive measures to eliminate or reduce them.

The process of assessing potential risks and analyzing the sources of hazards arising from the use of materials is prepared hazardous (chemical - microbial - radioactive) in the workplace is one of the most important basic elements of performance achievement and planning to implement the daily operations of the university,

#### 4.2 Risk management

In the risk management system, the term hazard means a situation or behavior that is likely to lead to injury, deterioration or harm to a human being.

Risk assessment is the process of assessing the severity of the risks posed by taking into consideration the accuracy of the control systems and determining if unacceptable or unacceptable

The basic principle of occupational safety and health is the management of occupational risks.

to simplify the risk management process, the USTF Occupational Safety and Health Manual adopt in the Five-Step Method for Assessing Risk:

**Step 1:** Identify the hazards.

Step 2: Decide who might be harmed and how. ...

Step 3: Evaluate the risks and decide on precautions. ...

Step 4: Record your findings and implement them. ...

Step 5: Review your risk assessment and update if. See Appendix No. 3



# 5.0 | Waste Management

#### 5.1 Introduction

This section introduces a method for managing, and final disposal of laboratory, clinics waste, which is the wrong handling of them may cause them to be high sources of risk to public health and the environment. In particular, the various debris that contains a hazardous mixture.

#### 5.1.1. Waste Management Strategy:

The waste management strategy aims to achieve the maximum amount of occupational safety and health and minimizing the negative impact on the environment. The University undertakes to:

- USTF committed to following efficient waste management and recycling procedures throughout the University and using recyclable and recycled materials whenever appropriate.
- USTF promoted a purchasing policy that will give preference, where practicable, to those products and services which cause the least damage to the environment.
- Waste should be prevented or minimized wherever possible and must be stored, carried, processed or disposed of following the principles of duty of care.
- Must be kept must keep debris in compliant and suitable containers and locations pending their disposal. Waste containers must be securely sealed to prevent accidental spillage or leakage.
- Removed Waste from the USTF must only be transported by persons or service providers authorized to do so.

#### 5.1.2. <u>Waste Management Legislation:</u>

- The Fujairah Municipality-Public Service & Environmental Department provides advice and guidance on complying with legislation and can view the at <a href="https://www.fujmun.gov.ae">https://www.fujmun.gov.ae</a>
- USTF has Waste Management Contract No. with the Fujairah Municipality to handle the University waste on regular basis.

#### 5.1.3. <u>Waste Management Procedures:</u>

- All USTF community members are expected to handle, store, recycle and dispose of materials following applicable UAE law and University waste management procedures.
- The following Waste Management Procedures has been produced to affirm USTF commitment to safe and efficient waste management, to reduce and recycle waste produced and to ensure compliance with and exceed all legal requirements relating to waste management.
- It also promotes environmental and recycling issues as an integral element of its activities and demonstrates its commitment to continual ecological practices improvement.
- Waste management procedures provide steps for USTF staff in dealing with waste and recycling issues.
- There are four levels of waste management and minimizing its negative impact on the environment:



#### 1. Waste Prevention.

The best approach to waste is to reduce it at source. There are amount of recycling wastes streams have been implemented at USTF. Several contracts with waste management and recycling firms have been established to provide the means to implement waste procedures.

USTF purchasing function has a real impact on the quantity and recyclable value of waste.

Choosing and buying recycled products is part of an overall waste reduction strategy. USTF Office of Procurement consider the following

activities as part of its function:

- To purchase refillable or reusable products, e.g. printer or toner cartridges.
- To use or lease equipment that has waste reduction features, e.g. photocopiers, email etc
- To use durable items where relevant, not one-trip disposable items
- To buy equipment that can easily be mended or has interchangeable parts
- To specify/buy items made with recycled materials
- To check stationery supplier catalogues for recycled items
- To consider using cost savings from waste reduction activities

#### 2. Waste Minimization

Minimizing waste saves money all along the process, from purchasing to handling, to disposal. Reducing USTF overall waste stream is the most cost-effective and environmentally and socially responsible approach to reducing waste-related costs.

Minimizing waste is a challenging attempt and will require lots or even hundreds of small projects as part of the process.

The following projects used at USTF to minimize waste:

• **Paper Reduction:** To achieve its vision, USTF has five strategic goals for the period 2018–2021, Goal (5): Achieving operational excellence in University services focus on promoting sustainable solutions and effective management of USTF resources in all areas.

Paperless working is aligned with the usage of more technology in academic and administrative activities

Waste minimization and recycling awareness: Minimizing USTF campus waste is everyone's responsibility. Every individual on campus needs to participate in recycling to reach its potential as a cost-effective, environmentally and socially responsible approach to handling our waste. What is required is a waste minimization and recycling awareness program for all campus users.

Awareness efforts should target strategic areas of waste minimization as follows:

- Recruit and integrate volunteers in promoting and collecting recycling on campus.
- Involve students in every aspect of the program to increase its effectiveness and increase experience and skills in the student body around recycling.



- Produce orientation material packets to introduce recycling to new students.
- Present awareness programs during the orientation process.
- Include waste minimization and recycling information and expectations in the new employee orientation
- 3. **Recycling and Reuse:** USTF maintaining procedures for the handling and disposal of Scrap/Surplus Moveable University Assets

USTF Composed surplus handling committee consist of the following members:

- Financial Controller Office of Finance
- Procurement Officer Office of Procurement
- Maintenance Supervisor University Facilities & Services
- Maintenance & Services Officer University Facilities & Services
- A representative of the concerned unit

This committee aims to handle the process for the disposal of scrap/surplus moveable assets.

Included in the surplus materials, all moveable assets, Waste Electrical and Electronic Equipment, Cardboard, Wood, Metal, furniture and equipment items surplus to one department may be useful to another University department or be saleable outside the University.

Office Procurement will arrange for the transfer of any item which is useful to another department. If there is no requirement within the University, Office Procurement Services will arrange for the item's external sale or disposal.

The University encourages the recycling of the following materials:

- Paper and Card, including Confidential waste
- Metal and Aluminum cans
- Plastic Bottles
- Glass
- 4. **Hazardous Waste:** USTF Clinical Waste is collected on a regular monthly basis from specific designated areas.

Before collection, chemicals are stored in a secure storage area. Access to the store can be arranged through the office of University Facilities.

A comprehensive list of chemicals that require storage must be supplied, can obtain this information from the Concerned College. Transportation and disposal of USTF produced hazardous waste shall be controlled under the rules, procedure and controls mentioned and specified UAE laws and regulations in coordination with Fujairah Municipality and according to the contract signed with USTF **See Appendix No. 11** 



# Appendix I | Critical Incident Emergency Plan

#### 1. Introduction

This plan aims to respond to and manage incidents that impact the USTF and its community. The Critical Incident Plan is part of the University's Occupational Environment Health & Safety Manual.

The purpose of this plan to identify and respond to critical incidents, alleviate the loss of University assets and operations, protect the University's reputation, reduce the impact on the University's people, the public and the environment and return to return to normalcy

Under this plan, all areas of the USTF are required to have adequate response plans and procedures in place that are relevant for their operational areas and consistent with this Critical Incident Emergency Plan procedures.

The Critical Incident Emergency Plan (CIEP) guides University officials to respond to or recover from an emergency. The CIEP focuses on all operations of every Colleges and Offices at the University.

USTF is committed to supporting the welfare of its students, faculty, staff and visitors. Preparing a campus critical incident emergency plan and allocating resources to respond to possible emergencies is one way the University offers this support.

The plan is formed following appropriate UAE laws, regulations and policies that govern crisis/emergency preparedness.

#### **2.** Scope and Applications

This plan is designed to manage all incidents that have impacted upon or have the potential to impact the University Community, services and operations, property, and the environment.

The incidents include both physical actions or hazards and other forms which may cause significant reputational damage or loss of University functions or operations applies to all staff and all incidents, emergencies and critical incidents arising on any USTF premises, or activity

The Context of the CIEP is intended to protect the safety and security of the entire USTF community in an emergency, and it's all documents apply to all members of the USTF community and visitors, contractors.

The CIEP is designed to provide administrative guidelines for the USTF community during times of emergency.

All USTF employees should be mindful of their responsibility for the confidentiality of information related to emergencies and critical incidents.



## 3. Definition

- <u>Critical Incident:</u> The situation at which the emergency services organization responds to deliver emergency services. Including rescue, fire suppression, emergency medical care, special operations, that carriages a potential threat to the reputation, standing, or good order of the University, its staff, students or the public, requires a high management level.
- <u>Emergency Communicator:</u> A group of adequately trained and equipped individuals to handle the emergency for which they are called. Emergency communicator provides, on a 24-hour basis, immediate response to bring the crisis under control. Emergency communicator is identified as, but not limited to:
  - Fujairah Police General Command
  - o Fujairah civil defense
  - UAE National Ambulance
  - Fujairah municipality
- <u>Critical Incident Management Team</u>: An ad hoc team of officers appointed by the USTF Chancellor to manage a Critical Incident
- <u>Critical Incident Management Team Leader</u>: Lead responsibility for implementation of emergency and critical incident procedures, including identification of potential situations, developing, documenting and communicating response plans, reporting on actual situations, and reviewing policy and procedures following a disaster or emergency.
- **Emergency:** A severe and unexpected threat to people and property's safety and security requiring immediate action. Emergencies include fire, flood, storm, gas leak, accident, building disaster, biohazard, and so on.
- **Evacuation:** The movement of people from a threatened area to a place of safety.
- **Preparedness:** Measures to ensure that, should an emergency or critical incident occur, resources and services are capable of coping with the effects. Measures can include planning, staff training, and acquisition of specific safety equipment, infrastructure and maintaining the safety of the University grounds.
- **<u>Response</u>**: Actions taken immediately prior to, during and immediately after an emergency or critical incident to ensure that its effects are minimized.
- **<u>Recovery:</u>** Measures which support emergency or critical incident affected individuals and University communities in reconstruction of the physical infrastructure and restoration of emotional, economic, environmental and physical security.
- **SANID:** National Emergency Response Volunteer Program of the UAE. Launched in 2009, SANID draws on the strengths of proven international models, particularly the Swedish Civil Defense League and the US Citizen Corps. It unites volunteers throughout the UAE who share a sense of social and civic responsibility and prepares them to cope with national and international emergencies, thus demonstrating the country's readiness to manage any crisis. SANID contributes to the community's resilience towards disasters, crises and emergencies by building a cadre of emergency response volunteers.



#### 4. Preparedness

The (CIEP) supports the University to prepare for potential disaster and emergencies and is reviewed annually.

All USTF Community are provided with training to ensure they are familiar with implementing (CIEP)

All USTF Community familiarize themselves with emergency evacuation procedures, including their responsibilities and the emergency evacuation assembly point.

All fire safety activities undertaken by USTF are recorded and reviewed to identify gaps in training, knowledge, equipment or processes.

USTF is keen to ensure that all fire activities include, but are not limited to, fire safety training, drills and exercises, records of maintenance and inventories of equipment kept.

Where relevant, all staff, students and volunteers familiarize themselves with techniques to minimize physical and emotional harm from other people.

#### **5.** Emergency Procedures

USTF is committed to the safety and security of all persons. USTF created procedures to ensure all University employees will be prepared to make safe choices should an emergency occur.

USTF Critical Incident Management Team (CIMT) has primary responsibility for the initial response in an emergency or a disaster. It shall cooperate and coordinate with official emergency response authorities and College Administration, following established policies and procedures.

All (CIMT), and volunteers are trained in disaster and emergency response procedures at induction and each semester by SANID.

Emergency evacuation drills are undertaken in all University Sites annually under Fujairah Civil Defense instruction.

Critical Incident Emergency Plan reviewed annually and following the event of a disaster or emergency.

All USTF staff have access to and are familiar with procedures relating to (CIEP).

All staff have information that outlines actions to follow for various disaster and emergencies and are supported to undertake specific roles in emergency and critical incidents.

USTF identifies, prevents and manages disaster and emergencies within its sphere of responsibility and influence until appropriate emergency services arrive.

A range of emergencies may occur on the buildings with the likely to influence the safety of USTF Faculty members, staff, students, visitors and contractors, including but not limited to:

- Fire
- Gas or water leak



- Vehicle and other accidents
- Chemical, radiation or biological spill
- Earthquake
- Death

When a disaster or emergency arises, the primary aim of the response is to ensure all people's safety on the premises, preserve life and protect property.

USTF initiates recovery and aims to restore operations as quickly as possible.

Faculty members, staff, students and visitors who experience a critical incident related to their involvement with USTF should immediately inform where possible Critical Incident Management Team Leader. If this is not possible, they should immediately notify Health and Safety Committee Chair.

A Critical Incident Report is to be completed by the staff member involved in the incident or notification of the incident.

A Critical Incident Report contains as much information as possible and indicates the people directly involved in the incident.

The staff member who receives the report will ensure that the person(s) identified in the critical incident receives all appropriate support.

They are to contact emergency services where required and must contact the Health and Safety Committee Chair immediately.

In conjunction with USTF higher management, the Health and Safety Committee Chair will assess the Critical Incident and implement a plan of action to follow up the Critical Incident.

Where required, a meeting will be organized to determine issues and responsibilities relating to:

- Assessing risks and response actions
- Contact with Emergency Communicator and other services
- Contact with the affected person's relatives and other supports
- Cooperate with other organizations
- Counselling and supporting for all who not directly involved in, but affected by, the incident.
- Media management (if required)

USTF will conduct a review of actions arising from the above meeting to ensure:

- Follow up such as de-briefing, counselling and prevention strategies have been completed.
- Relevant people have been informed of all outcomes from the incident.
- A recommendation about the critical incident is documented and included in the OIEP quality improvement cycle.
- Further, follow up required is documented and responsibilities allocated to appropriate staff.



#### **6.** Evacuation Procedures

In the event of a fire or other emergency, seconds count. The safe, orderly and prompt evacuation of building occupants depends on having the physical safety features of a building in operating condition as well as having an emergency evacuation plan. The cooperation and participation of every building occupant is essential. Every person that lives and works in a building on campus has an individual responsibility to know how to evacuate in an emergency and to accomplish the evacuation when the fire alarm device sounds or when directed by an authority. This guide will help you to prepare for emergency situations that might arise in your facility.

#### Pre-plan your escape

- Know the location of fire alarm pull box locations.
- Make sure your floor has at least two unobstructed ways out.
- Check the fire exits to make sure they are usable.
- Do not use the elevators. They could become disabled, trapping you on the fire floor.
- Know the location of fire rated stairwells that will provide a protected path all the way to the outside.
- Learn the sound of your buildings fire alarm. They could be bells, chimes, horns or a coded gong.

#### If there is a fire or fire alarm, everyone evacuates!

- If you discover a fire or smoke condition, sound the building alarm by activating the nearest pull station.
- Make a follow-up call to University Service number **0507765619** or **092023735** or police emergency number 998
- Whenever you hear the fire alarm sound, leave immediately! Don't assume the fire alarm is false or a test and wait to see what others do. In a fire, seconds count.
- Try to help others, if you can do so safely.
- Unless unusual conditions dictate otherwise, the best evacuation route is the nearest stairway and out the nearest exit.
- When leaving, close (do not lock) the door behind you. If the door locks automatically, take your key with you in case you need to get back in for refuge.
- Once outside, meet at your assembly point and take a head count to make sure everyone is out and accounted for. Never attempt to re-enter the building to search for someone missing, let fire or police officials know.

#### Is the door hot?

- Before opening a door, you should make sure there is no fire on the other side by using the back of your hand to touch the door, doorknob or door frame.
- If any feel hot, don't open it, there is probably fire on the other side. If cool, open the door slowly, leave the area and close the door behind you.
- Stay low when there is smoke.
- If you encounter smoke while escaping, crawl or get as low as you can. The cleanest air will be within 1 to 2 feet from the floor. If the main exit is blocked by fire or smoke, you should use your alternate route. If this is not feasible, go back in your room to wait for rescue.



#### If you can't escape

- Close all doors between you and the fire.
- Seal cracks around doors with cloth to keep the smoke out.
- Call 998 to notify them of your location.
- While waiting for rescuers, signal from a window by hanging clothes out the window,

#### Additional guidelines for the threat of fire:

In the event of a fire threat and safe to do so, close all doors and windows and turn off the power supply before leaving the premises.

## 7. Emergency Contact Numbers

In case of an emergency, you can call the following numbers:

- 999 for Police
- 998 for Ambulance
- 997 for Fire Department (Civil Defense)
- 991 for electricity failure
- 922 for water failure.



## Appendix 2| USTF Evacuation Drill Policies and Procedures

## 1. Introduction

USTF Annual Evacuation drills help ensure that faculty, staff, and students know how to safely exit buildings on campus and as quickly as possible. Campus-wide evacuation drills are conducted annually.

The purpose of evacuation drills is to ensure the efficient and safe use of the exit facilities available in an emergency.

Useful evacuation drills ensure orderly exit under control and prevent the panic that has been responsible for much of the loss of life in the significant fire disasters of history.

Instruction and regulator are the primary purposes of the evacuation drill. Speed in evacuating buildings, while desirable, is not in itself an object and should be made secondary to the preservation of proper order and discipline.

## 2. Responsibility

Evacuation drills shall be designed and conducted in cooperation with the Directorate of Civil Defense Fujairah. USTF Office of University Facilities shall assign responsibility for the planning and conduct of training and maintain a written record of drills conducted including a critique of the event.

## 3. General Guidelines

- 1. Evacuation Drills shall include suitable procedures to ensure that all persons in the building, or all persons subject to the drill, participate.
- 2. If a fire evacuation drill is considered merely a routine exercise from which some persons may be excused, there is a danger that the training will fail in its intended purpose in an actual fire.
- 3. All drills should be pre-planned and preannounced.
- 4. Any alarm not led by plan or announcement shall be dealt with as an actual fire condition.
- 5. USTF shall hold fire evacuation drills with enough frequency to familiarize all occupants with the drill procedure and conduct the exercise a matter of established routine
- 6. Evacuation drills should be cautiously planned to simulate actual fire conditions.
- 7. USTF evacuation drills should be held at varying times.
- 8. Still, they should use different means of exit based upon an assumption that if some given stairway is unavailable because of fire or smoke, all the occupants must be led out some other route.
- 9. Fire Exit Signs Adequate posted in all campus area.



- 10. A highly visual graphic design should be conspicuously posted with the following information:
  - a. Evacuation routes
  - b. Identification of "you are here" location
  - c. Location of the assembly stations
  - d. Location of portable extinguisher
- 11. Evacuation drills are scheduled to take place at Fall Semester annually
- 12. If you work, teach, or study in a building scheduled to be evacuated, plan for a thirtyminute disruption to your daily activities and know:
  - a. your evacuation procedure
  - b. the assembly point for your building
  - c. instructors assist your population in routing to the appropriate exit and assembly point.

## 4. Annual Evacuation Drill Summary Report

USTF shall provide annual evacuation drills report for all drills were conducted at University campus over a period of one day in each Fall Semester. The drills were facilitated by the Department of Civil Defense-Fujairah team with assistance from observer volunteers from across campus including all Colleges and Offices.

Evacuations occurred at all three occupied buildings on the university campuses.

## 2020 Evacuation Drill Report

Ensuring the safety of students, faculty and staff during an emergency is critical. Building evacuation drills are one way to prepare for an emergency and help create a safe campus environment. Evacuation drills are a regulatory requirement included in the USTF Occupational Environment Health and Safety Manual.

Evacuation drills provide many other benefits, including:

- The chance for emergency response staff and personnel to work out their roles, responsibilities and evacuation procedures.
- The strengthening of evacuation procedures and information including building exits and assembly points.
- Following the Evacuation drills, the information collected allows the USTF Office of University Facilities to identify improvement areas to increase the University's emergency readiness.



#### Annual Evacuation Drill Day (December 30, 2020):

This year's annual evacuation drills were conducted at all USTF building over one day on 30 December 2020. The Directorate of Civil Defense-Fujairah facilitated the exercises with assistance from observer volunteers from across campus including Colleges and Offices.

Evacuations occurred at an occupied building on the University campus. Hostel buildings will be drilled again early next Semester.

To improve the sustainability and efficiency, the Office of University Facilities will analyze the report and will be addressed immediate concerns

#### Type of operation:

General Evacuation:

#### Type of drills applied:

Training on evacuating a building that was exposed to a fire accident

#### Implementing agencies and participant:

- 1. Directorate of civil defense Fujairah-Operation Department- Fujairah civil defense fire station-Exercise Evaluation Committee
- 2. Fujairah Police General Head Quarter-Comprehensive City Police Station- Operation Department

#### Strength point:

- 1. The university evacuation plan was implemented correctly
- 2. The efficiency of safety devices and equipment in the university
- 3. Excellent activation of the security and safety team tasks
- 4. Perfect adherence to preventive and precautionary measures for COVID-19

#### Improvement opportunities:

- 1. Connect electronic gates to the alarm system
- 2. Adopting a single assembly point for easy communication and counting of numbers

#### **Recommendation:**

- 1. Continue evacuation drills for the university in cooperation with the civil defense.
- 2. Training of the security and safety team on the use of fire extinguishers.



## Appendix 3 | USTF Risk Management Policy

	Risk Management Pol	icy	
Policy Name	Risk Manageme	nt Policy	
Policy Owner	Vice Chancellor for Administrative and	Reviewed	Annually
	Financial Affairs		
Approved By	Chancellor	Approval Date	

This policy aims at identifying the probability of having negative consequences of certain incidents that might occur during the normal course of operations and thus clarifying the coordinated activities to control USTF's business continuity with regards to such risks. Each activity or task carries some element of risk. Therefore, it is imperative to have a proper risk management policy to identify and tackle risks that may affect the functioning and outcomes of various business operations, tasks and activities.

The University's management introduces this risk management policy as an institutional framework that provides guidelines to monitor and track possible risk factors that might cause disruptions to the smooth functioning of business operations, and thus hinder the fulfillment of its mission or strategic goals. The USTF risk management policy is tailored around international standards and the CAA risk management policy (Standards 2011 - 2.3 (2.3.1-2.3.4)).

## Academic Risk Policy

## **Identification of Potential Risks:**

- Students finding difficulty in meeting minimum requirements to proceed in the program.
- Students experiencing difficult financial or work problems that can lead to absence from lectures, tests, assignments, etc.
- Insufficient number of qualified faculty.
- Discontinuation of the program for any reason.
- Non availability of sufficient clinical sites for medical students' training

#### **Proactive Measures Plan:**

- Implementation of USTF quality assurance policies and procedures at different levels (course level, program level and college level) and reporting any related deficiencies to the higher levels.
- Adoption of continuous assessment and improvement strategies.
- Selection and retention of high-quality faculty to satisfy the requirements of the program in terms of teaching and research.
- Implementation of proper academic advising system (counseling, coaching, advising), and follow-up of students' progression.
- Building long term relationship with the Ministry of Health, Health Authorities and Health Zones in the UAE.
- Establishing training agreements with more reputable hospitals in Fujairah and neighboring emirates to expand the base of available clinical sites and create significant redundancy.
- Proper teaching load allocation to faculty in such a way that the faculty can carry his/her teaching, advising and research activities in a proper way.
- Proper timetabling of course offerings in such a way that students can attend lectures and other academic activities without delay or absence. This is especially important for working students who are tied-up with their work schedule.
- Organizing proper and informative orientation sessions for newly enrolled students to brief



them about the requirements of progressing and completing the program.

- Monitoring students' academic progression and taking proper actions before student's performance reaches the critical level of probation.
- Providing appropriate learning resources (library, laboratories, IT... etc.) to facilitate students' access to program and support service-related information.
- Preparing proper contingency plan in case any faculty member is unable to attend his/her scheduled academic activities for any reason (illness, emergency, conference, business travel, etc.) to ensure that the proper execution of approved program curriculum is continued.

#### **Reactive Measures Plan:**

- Whatever preventive actions that may be taken, some students' performance may fall below the acceptable level, and such students may not be able to continue their study in the program.
- In these cases, some remedial actions are needed so that the student can recover from such situation and continue his/her program of study.
- For such students, preparation and monitoring of individualized action plans (e.g. proper selection of courses, taking a remedial course. etc.) would help student recover.
- Long term plans to build or acquire a hospital to be designated as a teaching hospital for the University in the event that in spite of best efforts, clinical training sites remain inadequate
- If a decision is made to close an educational program, the university will strive to assist affected students so that they experience a minimal amount of disruption in their studies.
- USTF students will be notified of the decision to close a program as soon as possible and will be advised by faculty or student counselors regarding suitable options including transfer to comparable programs to complete their education.
- If required, arrangements will also be made to reassign faculty and staff affected by the closure of the program or assist them in locating other employments.

## **Teach-out Policy**

## **Policy Statement**

This policy addresses the University's responsibility to make necessary arrangements for students to complete their academic programs in cases where institutions are closed, or programs discontinued.

## **Risk Mitigation Methodology**

Following are the key steps that the University will take to meet its commitment towards those students who might be affected by discontinuation of an academic program or closure of the institution.

- Communicate with students the full details of the change taken by/ affected the University.
- Identify the potential accredited institutions offering similar program(s) to make the teach-out.
- Complete the necessary arrangements for students with selected institutions, ensuring that these arrangements are consistent with the requirements of the Commission's Substantive Change policy.
- Prepare a detailed action plan to ensure smooth transition of teach-out students between USTF and the receiving institution. This shall include all arrangements needed to maintain complete academic records and issuance of degrees.



- Make necessary arrangements to meet the possible financial obligations, in terms of the possible higher tuition fee rates, or due to the loss of credits as a result of the compulsory change of academic program or major, until completing all their academic requirements.
- Develop a monitoring process to be implemented by the College Dean/ Academic Head, with regular monitoring reports submitted to the Vice Chancellor of Academic Affairs (VCAA). The monitoring reports would include:
  - Detailed list of names of students in teach-out.
  - o Confirmation of affected students receiving letters and individualized academic plans
  - List of students advised into other majors, with identification of new majors (if required).
  - Progress of students in the teach out phase.
  - Advise the teach-out students how the University will assist in completing their programs.

#### Internship and Clinical Training Risk Management Policy

The purpose of this policy is to minimize the possibilities and consequences of the risks, hazards USTF's students can be exposed to during their internship or clinical clerkship training in affiliated hospitals. USTF aims at securing sustainable training places (including clinical training sites for medical students), for students and minimizing subsequent disruptions due to unavailability or loss of some of these locations.

#### **Policy Statement**

This policy acts as an outline that identifies the different sources of risks that can occur during internship of USTF's students, which should be properly managed in order to avoid and/or prevent any negative impacts of such situations. This is done through identifying each risk source, its significance, evaluation methods, and adopting the best mitigation options. During the two years that constitute the clinical training phase of medical students, they might be exposed to risks related to working in a hospital environment. This policy is outlining the features and practices of internship at USTF in order to reduce the associated risks.

#### **Risk Identification**

USTF Students must be properly oriented as to their role and responsibility at the training site and the possible sources of risks involved. Students must be advised of all requirements associated with the placement, including the risks associated with the training site. This include proper orientation as to how students protect him/herself from the various types risks and hazards which include fire, electrical shocks, exposure to chemicals, infections and radiation. For intern students' protection, a memorandum of understanding (MOU) is signed between USTF and companies accepting intern under their direct supervision and control to cover training objective, supervision, possibility of salary, stipend, transport, and liability; especially for acts that are willful, malicious, intentional or criminal.

#### **Risk Mitigation Methodology**

- Students are advised to acquaint themselves with training site and the possible safety hazards.
- Students are advised to wear protective coats and outfits whenever required by the site bylaws.
- Students are advised to seek advice whenever they are not sure about the safety of any system or device.



- Students should always be accompanied and supervised by the site supervisor.
- Students must be in continuous contact with their academic supervisor to tackle problems firsthand without delay.
- If students are doing their training within the university premises, then they must be aware of the various risks and hazards as stated in the Building Facilities Risk Management Policy.
- Alternative training sites must be arranged in case of shortage or unavailability of the current places.
- Continuous revision and updating of contacts in order to ensure the availability and suitability of internship sites.
- Health insurance cover for medical students as well as a clear policy in the relationship between the University and the affiliated hospital that they will provide the same degree of emergency care for an affected student as they would any of their own staff.
- •

## **Availability of Sustainable Training Locations**

It is the responsibility of the Office of Career and Placement Services to screen the available training sites and select the most suitable and safe training locations in view of the student's specialization, and in collaboration with the concerned colleges. The Career and Placement Services Office must establish contractual, sustainable and strategic relationships with these sites in order to secure the placement of students for internship.

#### **Financial Risk Management Policy**

#### **Policy Statement**

This policy serves as a comprehensive framework that identifies, evaluates, and mitigates the negative impact of different sources of financial risks, which may expose the University to potential losses of financial resources or fluctuation of financial performance. Therefore, a structured methodology is established and adopted by the University to regularly identify such risks, evaluate the negative financial impact of certain events, decide their significance and adopt the best risk mitigation options to deal with such risks.

#### **Risk Identification:**

Credit Risk

Credit risk is the risk that one party to a financial instrument will fail to meet an obligation, causing the other party to incur a financial loss.

Liquidity Risk

Liquidity risk is the risk that the University will encounter difficulties in raising funds to meet its liabilities when they become due.

- <u>Interest Rate Risk</u> The University is exposed to interest rate risk on its interest-bearing assets and liabilities; namely fixed deposit, medium-term loan and borrowings.
- Accounts Receivable Risk

While the University balances between the interests of all stakeholders, certain special situations faced by some students can justify granting them credit facilities by postponing the payment of due balances or accepting settlements by post-dated cheques. The accounts and cheques receivable risk is identified by the overdue customer balances as well as the cheques receivable and the potential that such amounts are becoming uncollectible

Business Risk



Business Risk involves the risk of declining revenues due to decrease in number of students or prices, or the uncontrolled increases in expenditures during the normal course of business activities, which will ultimately affect the financial performance and the ability to meet certain requirements to ensure smooth running of operations.

#### **Risk Evaluation and Mitigation Methodology**

Credit Risk

Financial assets, which potentially subject the University to concentration of credit risk, consist principally of the current bank accounts and deposits/ saving accounts. The University mitigates its credit risk regarding the bank deposits throughout:

- Dealing with high credit quality financial institutions, in addition to conducting continuous review of the financial institution's credibility, considering the trade-off between the benefits obtained from dealing with certain financial institution and the credibility risk involved.
- Extra available funds are invested in short-term fixed deposits that do not exceed 1-year maturities and over several maturity dates carefully distributed across the year to ensure satisfying any urgent cash needs for operational requirements to avoid liquidating any of the deposits before the maturity date and thus losing the expected profit.
- The University's management is continuously evaluating its investment credit risk to ensure that the credit risk related to bank accounts lies within an acceptable range.
- Liquidity Risk

To mitigate such risk, the management should ensure the availability of diversified funding sources along with continuous monitoring of liquidity sufficiency on regular basis.

- Cash flows forecasting serves as a key indicator of future cash sufficiency, which helps providing an early alarm pertaining to any anticipated liquidity problems.
- Cash safety margin must be maintained, that is equivalent to a minimum of 3 times total monthly operating expenses.
- Availability of easily accessible sources of funding; either through equity or debt sources, should be maintained in order to raise necessary funds to meet any financial obligations and ensure smooth running of operations. Reliable and sustainable relationships with banks and other financial institutions should be maintained to facilitate providing the necessary funds within a short period.
- Interest Rate Risk

To mitigate the risk of having lower rates on deposits or higher rates on term borrowing compared to the changes in interest rates prevailing in the market, the University's financial management should:

- Keep diversified ranges of maturities of its deposits, which allows quick reaction according to changes in the market rates.
- This method also reduces the exposure to the risk of losing the profitability of such fixed deposits due to potential early liquidation of the deposits to meet emerging spending requirements.
- In addition, the University should conduct a continuous revaluation and analysis of the market rates to maximize interest revenues on deposits and minimize interest expenses on borrowings.

#### Accounts Receivable Risk

The accounts receivable risk is mainly involved with amounts due from students, sponsors, tenants and other customers. The University mitigates the accounts receivable risk throughout:

- Continuous review of the aging of accounts receivable balances, identification of those old accounts with high probability not to be collected, setting strict internal controls and procedures, and seeking to reach to settlements with parties having accumulated old receivable balances.
- Tracking the amounts of bounced cheques, their value dates, and taking needful actions



towards collecting such accumulated balances.

- In addition, the University should implement strict measures prior to accepting cheques as an option to settle due accounts receivable, throughout reducing their maturity periods to the minimum, and keeping an updated customer profiles to provide a readily available history of cheque collection, enabling to take informed credit facility decisions in the future.
- The University should continuously find sustainable funding sources throughout different fundraising activities that aim to provide financial assistance to help students having financial disabilities to settle their due balances, thereby mitigating the negative financial impact of default accounts.
- Setting credit limits for customers, students and sponsors, and continuously monitoring the overdue balances as well as the outstanding receivables. The credit limits should be reviewed on regular basis to avoid accumulation of large balances of accounts receivables.
- System controls should be also put in place to easily identify accumulated balances and alert the finance team to take necessary action towards collection.
- The collection of Post-Dated Cheques (PDC's) is done as a guarantee against the collection of outstanding receivables. However, accepting such PDC's should be subject to approvals in view of the credit history, with maturity dates that should not exceed a period of 6 months.
- Sufficient allowances for doubtful debt are taken as a reserve to face any future losses due to uncollectible accounts, thus ensuring the stability of financial performance. The management must ensure that such allowances are sufficient and provide reasonable coverage of doubtful debt to avoid material loss or fluctuation of the financial performance.
- Business Risk

To avoid the potential negative impact on financial performance and the ability to meet certain requirements, and to ensure smooth running of operations, several approaches and techniques should be adopted by the University's management to mitigate the different types of business risks asfollows:

- The University's management should follow a continuous improvement approach as a methodology to mitigate such risks, throughout continued efforts that aim at improving the quality of academic programs; studying the dynamic market needs for new knowledge areas, and
- introducing new academic programs that fulfill such needs and stimulates sustainable business growth.
- The planning and budgeting process also help addressing the key business risks involved in different business activities, and the level of uncertainty that is inherent in the planning process. The annual budget preparation cycle illustrates how the University plans and provides the optimal allocation of resources as needed to achieve AU's strategic goals and objectives.
- As part of the annual operating budget preparation cycle, and to account for the normal uncertainty with regards to emergency spending needs, a contingency fund should be created to provide necessary funding for any unplanned or emergency spending needs. The contingency fund should be estimated as a fixed percentage of the annual operating spending budget.
- An in-depth planning and financial feasibility of launching any new academic program or investing into other expansion projects must be conducted. By adopting such approach, the University will be able to expand its students' base and diversify the revenue generating activities while minimizing the business risks involved in such activities and being wellprepared for any potential financial surprises that may corrupt operational activities.
- To better manage the other risk factors inherent in operations, the University mitigates the negative impact of some potential events that rest outside the control of USTF management, by enrolling into several insurance policies. These include:



#### <u>Fidelity Insurance Policy:</u>

To indemnify USTF against any loss sustained by any act of fraudulent embezzlement or misappropriation of any employee who's dealing with cash amounts.

## <u>Public Liability Insurance Policy:</u>

To indemnify USTF against any loss due to the legal liability arising from running the business activities, where USTF may become legally liable to pay for compensation in respect to accidental bodily injury to third parties or accidental loss or damage to third party's property.

Money Insurance Policy:

To indemnify USTF against any loss of cash amounts and the cost of any related damage that is associated with any theft or attempted theft during the normal course of business activities.

Property All Risks Insurance Policy:

To indemnify USTF against any loss caused by any incident or event that exposes USTF's properties and its contents to losses or damages suffered as a result of the occurrence of common perils, such as fire, building destruction, or damage of any insured contents.

Public Liability Insurance – Internship Activities:

To indemnify USTF against any legal liabilities towards any third party, including students, in respect of personal accidents and/or property damage arising out of internship activities of students in the medical fields, who are exposed to high risks of lab materials; pharmacy, dentistry and clinical training activities, either in-campus or outside.

## **Financial Risk Management Responsibilities**

The following identifies the roles that assume specific risk management responsibilities.

Responsibility	Risk
Chief Accountant and Finance Manager	Credit Risk
Finance Manager	Liquidity Risk
Financial Controller and Vice Chancellor for Administrative and Financial Affairs	Interest Rate Risk
Senior Accountant and Financial Controller	Accounts Receivable Risk
Financial Controller, Budget Supervisor, and Vice Chancellor for Administrative and Financial Affairs	Business Risk

## Information Technology Risk Management Policy

## **Policy Statement**

This policy serves as a comprehensive framework that identifies the different sources of technical risks that the University is exposed to. These risks should be properly managed in order to avoid their possible negative consequences such as data loss or major system failure. Measures are regularly conducted to identify each risk source, its significance, evaluation methods, and the adoption of optimal options to mitigate it. A major damage or failure in any of the following I.T. infrastructure or services may cause a serious disruption of operations and thus represent key risk components.



#### **Risk Identification**

## Servers and Storage:

Hardware failure in a server may cause a failure in one of the core services; such as registration or finance applications.

## Network Appliances:

Any failure or damage to some of the Network appliances may imply complete or partial outage of campus services.

#### LAN, WAN, and Internet Connections:

A disruption in any of these connections may cause outage in all web services, thus corrupting the smooth running of several academic and operating services.

#### **Risk Component Analysis**

Information Resources and the processes of using them represent vital part of the ongoing mission of the University and its goals and objectives. The following describes these risks in more detail.

#### Threats and Vulnerabilities:

Threats can be both, internal and external, and come in many different forms. The common element is they work against the confidentiality, integrity, and availability of information resources. Some of the possible threats would be the alteration of data or systems or release of protected information. Others can be hackers or viruses.

Vulnerabilities are weaknesses or holes in information resources and processes, which allow the potential for unauthorized or unintentional change or manipulation of resources, which affect the confidentiality, integrity, and availability of these resources. Vulnerabilities, and overall impact for every information resource, not only must be evaluated, but also re-evaluated on a regular basis to ensure these ongoing risk(s) are continuously managed.

## Data Loss:

Data loss can occur on any device that stores data due to one of the following:

- Human error, accidental or unknowing data deletion, modification, overwrite.
- File corruption: software error, virus infection
- Hardware: drive failure, controller failure CPU failure
- Site-related: theft, fire, force majeure such as floods, earthquake, lightning, etc.

## Unplanned Service Outage:

Unplanned Service Outage may occur due to one of the following:

- Hardware failure such as damage in server or LAN/WAN equipment.
- Software problem may cause failure in I.T. service/s.

#### **Risk Evaluation and Prioritization:**

The following describe how different risks are evaluated and prioritized.

#### Threats and Vulnerabilities:

Threats and vulnerabilities become risk when they cause exposure of confidential information such as student records, or exam questions.

#### Data Loss:

This risk is evaluated by reviewing the type and size of the lost data.



#### Unplanned Service Outage:

This risk is evaluated by the time, period, and consequences of the service outage.

#### **Risk Mitigation Methodology:**

• The following describe, in general terms, the risk mitigation options. The Office of I.T. provides the following solutions to mitigate the risks, as follows:

## Threats and Vulnerabilities:

The Office of IT is reducing this type of risks by installing the antivirus software on all USTF PC's, laptops and servers; keeping all such devices updated, and by using Firewall to isolate the servers in a healthy and protected environment.

#### Data Loss:

The Office of IT has set a backup policy to protect the critical data by recovering them in case of loss (see backup policy). A disaster recovery site is used to provide high availability of the critical data and services. Furthermore, the recovery tools are used, in case needed, for individual loss of data.

#### Unplanned Service Outage:

The Office of IT is committed to ensure continuous and uninterrupted availability of all services as follows:

- Uninterruptible Power Supply (UPSs) and Power Generator connectivity for the most critical LAN/WAN connections and servers, to avoid disruption due to power shortage.
- Hardware and Software Support agreement 24 X7 for the most critical equipment and services.
- The I.T. has transferred all the critical services to virtual environment, which reduces the time of service recovery, and increases the high availability.
- Backup devices and servers are provided.

#### **Risk Plan Maintenance:**

The following describe the different methods for maintaining or updating the risk plan.

#### Threats and Vulnerabilities:

Following up on the Antivirus, updating servers and monitoring them.

Data Loss:

Applying the Backup Policy and confirming that the taken backups are healthy.

## <u>Unplanned Service Outage:</u>

Monitoring all LAN and WAN equipment, UPS's and servers, ensuring that all equipment are functioning in a perfect manner, and maintaining all I.T. equipment and services under external support agreement to increase the level of high availability.



#### **Risk Management Responsibilities**

The following Identifies the IT roles with specific risk management responsibilities.

Responsibility	Risk
The System Administrator and System Engineer under	Threats and Vulnerabilities
the supervision of the Head of System/Network Team.	Inreats and vumerabilities
The System Administrator and DB Administrator	Data Loss
The Network and System team, I.T. Manager	Unplanned Service Outage

## **Facilities Risk Management Policy**

#### **Policy Statement**

This policy acts as an outline that identifies the different sources of risks that USTF facilities and infrastructure are exposed to, that should be properly managed in order to avoid and/or mitigate any potential negative impact. This is done through identifying each risk source, its significance, evaluation methods and the adoption of best risk mitigation options. The purpose of this policy is to structured methodologies to help minimizing the possible negative consequences of future damage to USTF facilities and infrastructure, and the subsequent disruption in University's operations and services.

#### **Risk Identification**

- <u>Technical Faults and Breakdowns:</u> Any partial or total shutdown that can have a direct impact on the University's operations and continuity of key services.
- <u>Fire:</u>

In the event of a fire outbreak, it becomes crucial that the fire safety system and processes are instantly activated to contain the spread and thus minimize the impact and loss.

- <u>Utility Outages</u>
   Electricity and water shortages can significantly disrupt the functioning of the University's various colleges, offices and other common facilities.
- <u>Structural Incidents:</u> Any structural collapse or failure in any of the University's infrastructure will have disastrous consequences.
- Emergencies:

Any emergency such as but not limited to natural disasters (earthquake, flooding, etc.) is beyond human control and can affect USTF facilities and infrastructures critically.

Safety and Security:

Considering the number of students and visitors of USTF campus and its extended buildings and facilities, undesired situations and incidences, disturbance and violence that can erupt in the University could jeopardize the safety and security of the occupants, facilities and infrastructure.

## **Risk Component Analysis**

Technical Faults and Breakdowns:

USTF facilities and infrastructure should remain in perfect functional state for efficient, reliable and normal operations at all times. This requires prompt and effective repair services and periodic preventive maintenance to be carried out to minimize or prevent facilities down time or closure.

Fire:

Fire is an unpredictable and inherent risk in University's environment and carries a high damage potential. The existing facilities and infrastructure do possess the necessary fire safety mechanisms and processes.



#### Utility Outages:

Uninterrupted power and water supply for USTF facilities is essential and of paramount importance for its functioning and operations. These basic utilities within the Emirate of Fujairah are supplied by a federal government authority, and mostly seem to be stable, sustained and reliable.

#### <u>Structural Incidents:</u>

A safe, stable and reliable building facilities and infrastructure, which meets the relevant and required standards is a primary requirement for any educational institution. The existing infrastructure appears to be infair and stable condition. Maintenance and repairs are undertaken as and when required.

<u>Emergencies:</u>

It is imperative that a clear, effective and tested evacuation plan is compiled, and is circulated and posted for the facility's occupants in order to be well prepared for any such emergency incidents.

Safety and Security:

It is of utmost importance that USTF facilities and infrastructure are always safe and secured for the protection and comfort of all its occupants; faculty, staff, students, and visitors. USTF facilities do possess security systems and personnel for overseeing internal safety and security.

## **Risk Evaluation and Mitigation Methodology:**

Technical Faults and Breakdowns:

This risk potential is regularly evaluated by monitoring the frequency of reported faults and breakdowns; periodic assessments of USTF's facilities and infrastructure; amount of resources and personnel needed for carrying out maintenance and repairs. The University mitigates this risk by conducting regular inspection of all USTF facilities and infrastructures; scheduling and conducting preventive maintenance of key areas of USTF's facilities and infrastructure; keeping inventory of vital spare parts and backup equipment to minimize facilities downtime; ensuring the availability of sufficient maintenance personnel for immediate action and resolution at the earliest; conducting regular training of maintenance personnel for prompt and effective responses to potential technical issues.

Fire:

Periodic review and assessment of the fire safety mechanisms, equipment and processes within USTF's facilities and infrastructure; as well as the history of fire incidents represent key indicators of exposure to such risk. This is mitigated throughout the continuous evaluation and identification of potential fire hazards; inspection of the status and condition of the fire safety systems, mechanism, equipment and processes across all USTF facilities and infrastructures, in addition to scheduling and conducting preventive maintenance of fire safety systems, mechanisms and equipment; compiling fire safety manual, evacuation plan and spreading awareness; conducting fire safety and evacuation drills; communication and information exchange with civil defense authorities, hospitals and other relevant authorities; putting in place loss/damage insurance policy.



#### Utility Outages:

Periodic assessments of utility infrastructure of USTF's facilities; communication and information exchange with the utility provider; history of utility incidents within USTF's facilities represent fundamental component to enable maintaining a proper plan to control such risks. This risk is mitigated throughout the continuous evaluation of the status and condition of the utility networks across USTF facilities and infrastructure; communication and regular information exchange with the utility service providers for prioritized supply restoration to USTF's facilities, scheduling and conducting preventive maintenance of key utility infrastructure of USTF's facilities, and backup supply provision arrangements.

#### Structural Incidents:

The regular evaluation of the status and condition of the structural reliability of USTF facilities and infrastructure is conducted to ensure the maximum safety of all USTF's structures, in addition to scheduling and conducting preventive maintenance of key areas of COD clinical facility and infrastructure; communication and information exchange with civil defense department, hospitals and other relevant authorities; as well as the availability of loss/ damage insurance policy.

#### <u>Emergencies:</u>

To best meet the requirements of controlling such type of risks, USTF maintains sustainable communication and information exchange channels with relevant emergency management authorities and government bodies, in addition to compiling Emergency Manual, evacuation plan and spreading awareness; conducting safety and evacuation drills; and the availability of public liability loss/ damage insurance policy.

#### Safety and Security:

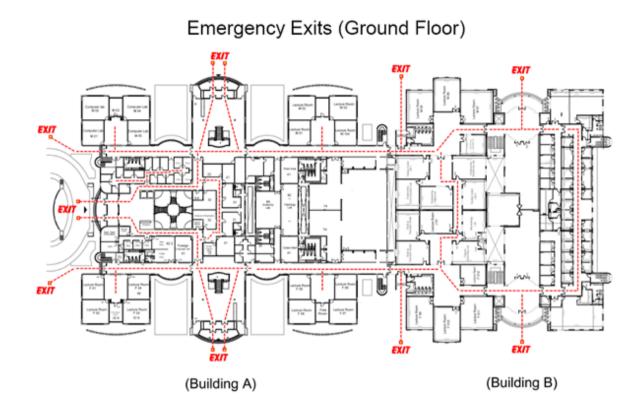
The risks associated with safety and security systems are regularly evaluated in view of the capacity of facilities, the status of building machinery and equipment, as well as the analysis of the volume and demographics of people visiting USTF facilities; using and working in the USTF facilities, to ensure the availability of all needed resources, tools, procedures and equipment, such as camera monitoring systems, sufficient security personnel, building evacuation plans, scheduled and implemented preventive maintenance of existing security systems and equipment; effective management and control of the occupants of USTF's facilities, and information exchange with relevant security authorities.

## **Facilities Risk Management Responsibilities**

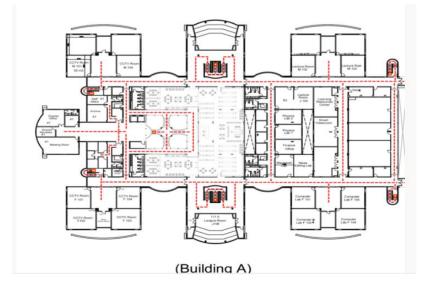
Responsibility	Risk
	Technical Faults and Breakdowns
Facilities and Services Manager	Fire
Facilities and Services Manager	Utility Outages
	Structural Incidents
Facilities and Services Manager and Top Management Emergencies	
Facilities and Services Manager, Head of Security Office	Cofety and Convity
and Top Management	Safety and Security



# Appendix 4| Emergency Exit Ground Floor



## Appendix 5| Emergency Exit First Floor





# Appendix 6 | Emergency Exit Second Floor

Emergency Exits (Second Floor)



(Building A)



# Appendix 7 | SANID Internal Trainings



SANID Training 19/05/2019



SANID Training 30/09/2019



SANID Training 09/11/2019





SANID Training 26/11/2019



SANID Training 26/11/2019



SANID Training 26/12/2020





SANID Training 26/12/2020



# Appendix 8 | Certificate of Compliance with Preventive Safety Requirements





## Appendix 9| Civil defense evacuation certificate

نظام المراسلات الالكتروني

United Arab Emirates Ministry of Interior General Directorate For Civil Defen Directorate Of Civil Defense Fujirah



Page 1 of 1

دولة الإمارات العربية المتحدة وزارة الداخلية القيادة العامة للدفاع المدني إدارة الدفاع المدني الفجيرة قسم العمليات

الرقّـم : 11960 - 15/5/5/5 التاريخ : 2020/12/30م الموافق : 14/جمادي الأولى /1442 هـ

السيد / مدير جامعة العلوم والتقنية / الفجيرة المحترم

الموضوع : تقرير عملية اخلاء رقم (26)

يطيب لنا ان نبعث لكم خالص التحية والتقدير.

- مرفق بطية التقرير الخاص بعملية الاخلاء التي تم تنفيذها بمبنى الجامعة بتاريخ 2020/12/30م.
  - للتفضل بالعلم واجراءاتكم .. لطفا.

واقبلوا وافر الشكر والامتنان ،،،



نسخة إلى : • قسم العمليات • 30/12/2020 - 300840 • 490307 30/12/2020 - 801578

12/30/2020

http://moiecs.moi.ae/ecs/ECS\_016.DOCUMENT\_VIEWER



دولة الإمارات العربية المتحدة وزارة الداخلية القيادة العامة للدفاع المدني إدارة الدفاع المدني الفجيرة / العمليات



ıb Emirates Of Interior Command Of Civil Defense orate of Fujairah Civil Defense

	تقرير تمرين إخلاء رقم 2020/26م	
		- نصوع العملية :- إخلاء عام .
1	الاربعاء الموافق 2020/12/30م الساعة ( 11.00 ) صباحا .	- <u>البـوم والتاريخ والوقت :-</u> يوم ا
	على عملية إخلاء لمبنى تعرض لحادث حريق .	- نوع التمرين المطبق :- تدريب ع
		- بيانات المنشأة:-
	جامعة العلوم والتقنية في الفجيرة	اسم المنشأة
	بعد المعوم والصية على المبيرة	المدينة - المنطقة
	40	العدد المستهدف
		- الجهات المنفذة والمشاركة :-
1.	قسم العمليات - لجنة تقييم التمارين – مركز الدفاع المدني المدينة .	
~	- مركز شرطة المدينة الشامل - ادارة العمليات .	2- القيادة العامة لشرطة الفجيرة
		- نقاط القوة :-
	ة بالشكل الصحيح .	<ol> <li>1. تم تطبيق خطة الاخلاء للمنشأة</li> </ol>
	في المنشأة .	2. كفاءة أجهزة ومعدات السلامة
		3. تفعيل وابراز دور قائد الفريق
		<ol> <li>בفعيل مهام فريق الامن والسلا</li> </ol>
	لاحترازية ( COVID 19 ) بشكل ممتاز .	5. الالتزام بالاجراءات الوقانية وا
		- فرص التحسين :-
	الانذار	<ol> <li>1. ربط البوابات الالكترونية بجها</li> </ol>
		<ol> <li>1. رجب بي بي المروح بيه.</li> <li>2. اعتماد نقطة تجمع واحدة لسه.</li> </ol>
		- التوصيات :-
	سسة بالتعاون مع الدفاع المدني .	<ol> <li>مواصلة تدريبات الاخلاء للمؤ.</li> </ol>
	على استخدام الطفايات .	<ol> <li>تدريب فريق الامن والسلامة د</li> </ol>
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هاتف : 09-2228884 - 09-2228884 - 09-2058555 FAX : 09 ص.ب 344 الفجيرة - دولة الإمارات العربية المتحدة TEL : 09 - 2228884 - 09-2058555 FAX : 09 - 2281119 P.O.BOX : 434 - FUJAIRAH – UNITED ARAB EMIRATES



## Appendix 10 | Civil Labs Safety Procedures



جــامعــة العلــوم و التقنيـة فـي الفجـيرة University of Science and Technology of Fujairah

# ELECTRICAL EMERGENCY RESPONSE

The following instructions provide guidelines for handling two types of electrical emergencies:

# 1. Electrical Shock:

When someone suffers serious electrical shock, he or she may be knocked unconscious. If the victim is still in contact with the electrical circuit, immediately turn off the electrical power source. If you cannot disconnect the power source, push in the emergency poweroff button.

Do not touch a victim who is still in contact with a power source; you could electrocute yourself.

Have someone call for emergency medical assistance immediately. Provide first-aid, as appropriate.

# 2. Electrical Fire:

If an electrical fire occurs, try to disconnect the electrical power source.

If the fire is small, use any type of fire extinguisher to extinguish the fire.

Do not use water on an electrical fire.



جـــامعــة العلـــوم و التقنيــة فــي الفجـ يرة University of Science and Technology of Fujairah
Laboratory Safety Rules
*No laboratory session shall be performed without the presence of a Laboratory Supervisor.
Before equipment is made live, circuit connections and layout should be checked by a Laboratory Supervisor, unless specifically advised otherwise.
Voltages above 50 V rms AC and 50 V DC are dangerous. Extra precautions should be considered as voltage levels are increased.
Never make any changes to circuits without first isolating the circuit by switching off and removing connections to supplies.
*Be familiar with the electrical hazards associated with your workplace.
<b>*Be as careful for the safety of others as for yourself.</b>
<b>*</b> Use extension cords only when necessary and only on a temporary basis.
Isolate damaged cords, cords that become hot, or cords with exposed wiring.
*Know the correct handling procedures for batteries, cells, capacitors, and other high energy-storage devices.
Experiment left unattended should be isolated from the supplies. If for special reason, it must be left on, a barrier and a warning notice are required.
Equipment found to be faulty in any way should be reported immediately and not used until it is inspected and declared safe.
Laboratory users should be familiar with the locations and operation of safety and emergency equipment such as fire extinguishers, first-aid kits, emergency power-off and emergency exits.
In case of emergency, call Campus Security (09)2023738.





# LABORATORY REGULATIONS

Food and drinks shall not be brought into, stored in or consumed in a Laboratory.

**Smoking is prohibited in Laboratories.** 

**\***You must work quietly in the Laboratory.

**\***Be tidy and keep the Laboratory clean.

**\***Unauthorized person(s) shall not be allowed in Laboratory.

The Laboratory shall remain locked other than Laboratorysession hours.

\*Laboratory sessions must be attended on time. Students coming late will not be allowed to enter the Laboratory.

Before you leave, arrange all equipment on your table in the same condition as you found it.

\*Report all problems to the Lab Supervisor.



## Appendix 11 | IT Server Room Fire Extinguisher/Suppression Contract



## PROPOSAL DOCUMENT FOR

## **Fujairah University- Data Center Project**

Submitted to - Mr. Haitham Fujairah University Dubai,UAE

Dated:28/07/2019 Ref :TNC/FUDC-ND-2807



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Dear Sir,

We would like to thank you for enquiring about our services.Please find below our best quote containing the prices and the description of the services that you had placed your enquiry of.

	COMMERCIAL OFFER FOR DATA CENTER -FUJAIRAH UNIVERSITY	
I	DESCRIPTION	PRICE
A	RAISED FLOOR- MERO GERMAN	17,225.00
В	CLOSED CONTROL DX UNIT -AIREDALE -UK	73,250.00
c	FIRE SUPPRESSION SYSTEM	30,500.00
D	CABLING FOR UPS	9,850.00
E	CIVIL WORK	4,300.00
F	CABLE RE ARRANGEMENT- EXSITING RACKS	4,500.00
G	ACCESS CONTROL- VANTAGE	1,000.00
	TOTAL PRICE	AED 140,625.00
	DISCOUNTED PRICE	AED 130,000.00
	VAT 5%	AED 6,500.00
	TOTAL PRICE INCLUSIVE OF VAT	AED 136,500.00



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SI N	Description	Qty		
51 N	Description	QLY	Unit Price	Total Price
Α	RAISED FLOOR- MERO GERMAN			
1	Supplying MERO GERMAN calcium sulphate 600X600X34MM steel bottom top HPL finish panel with 20cm pedastal & stringers with wastage (Sq mtr)	27		
2	Supplying Perforated tiles	5		
3	Transportation,shifting, delivery Raised floor tiles & accessories to site Installation of new raised flooring with pedastals for an area of 27 Sq mtrs	LSM		17,225.00
	Delivery: 1-2weeks from the date of order confirmation		SUB TOTAL         17,225.00           SUB TOTAL         17,225.00	
	Note:			e Total Price 17,225.00 L 17,225.00
	Unwanted Equipment to be moved out of DC			
			SUB TOTAL	17 225 00
-				17,220100
В	CLOSED CONTROL DX UNIT -AIREDALE -UK		1	
4	Supplying Commissioning of Close Control Unit Made by - AIREDALE UK Rated 26 KW (7.39 TR) EASI COOL RANGE- DX TYPE DF26X2-EZRE-0	1		
5	Providing Base frame metal Stand for Indoor unit & Base foundation for the outdoor unit	1		
6	Providing Gas cylinders - R410A 3nos for CCU	1		
7	Supplying ball valve units	4		73,250.00
8	Transportation, Offloading & Shifting of CCU $$ to the place of Installation	1		
9	Supplying & laying 16mm 5 core rubber cable for CCU input power	LSM		
10	CCU piping ,Supply & fixing inlet/outlet piping 35mtrs , Drain water line piping 35mtr,Positioning the units & installation	1		
11	Supply & installation of Automatic change over panel	1		
	Supplying Drain Line Condensate pump -1800.00 AED/ UNIT OPTIONAL			
	Delivery: 1-2 weeks from the date of order confirmation. Warranty:2 years standard manufacturer warranty will be provided			
	Note:			
	Drain line to be arranged by the client inside datacenter room at floor level.			
	Main power for CCU unit to be provided inside Datacenter room .			
	Outdoor unit location to be confirmed by the client. Unit will be positioned accordinly.			
	CCU input must be provided by Building team with appropriate isolator			
			SUB TOTAL	73,250.00





	FIRE SUPPRESSION SYSTEM			
12 1	Design, Supply and Testing & Commissioning of FM 200 / HFC-227ea Clean Agent System (UL Listed / FM Approved) to NFPA 2001	1	30500.00	30,500.0
	Room Area-26Sq mtrs FV-30cm & RV-253cm CV-60cm			
	i) Civil defence approval is not included in our scope			
	ii) Integration with BMS is not covered in our scope same must be taken care by the concerned BMS team. Dry contacts will ve avilable on the fire panel to connect the fire and trouble alerts			
	iii)one time room Integrity Test (Free of Charge) to check and ensure the tightness of the room additional Room Integrity Test will be performed (with extra cost) at the rate of AED 2000/-			
	iv) Any refilling of gas discharge due to fault condition is not included in our SOW, We advise in case of any maintenance the same should be disabled to avoid accidental discharge			
	v)NOC to be obtained for the interfcing activity from the building maintenance team			
	Delivery: 1-2 weeks from the date of order confirmation			
	Warranty: 2 years standard manufacturer warranty from the date of commissioning			
	Note:			
	Datacenter room should be completely air tight.			
	Existing sprinklers to be removed by the client.			
	Glass window to be partitioned withfire rated materials. Doors & cuborts to be closed properly with fire rated material.			
			SUB TOTAL	
_			SUD IUTAL	30,500.0
D	CABLING FOR UPS		SUBTUTAL	30,500.0
			SOB TOTAL	30,500.0
	CABLING FOR UPS Supplying & laying 16mm 5 core rubber cable for UPS input /output re routing	LSM	SUBTUTAL	30,500.0
3		LSM LSM	SUBTUTAL	30,500.0
3	Supplying & laying 16mm 5 core rubber cable for UPS input /output re routing			
.3 .4 .5	Supplying & laying 16mm 5 core rubber cable for UPS input /output re routing Supply & installation of 32A industrial sockets with 6mm 3 core rubber cabling	LSM		
13 14 15 16	Supplying & laying 16mm 5 core rubber cable for UPS input /output re routing Supply & installation of 32A industrial sockets with 6mm 3 core rubber cabling Supply , installation & connection of 12 way PDU Normal UK type	LSM 8		30,500.0 9,850.0
13 14 15 16	Supplying & laying 16mm 5 core rubber cable for UPS input /output re routing Supply & installation of 32A industrial sockets with 6mm 3 core rubber cabling Supply , installation & connection of 12 way PDU Normal UK type Electrical DB modifictaion : changing ELCB ,installation 40A 4P MCB, 32A SP MCB GI Heavy duty Cable tray Work:Supply & installation of 100X50mm Heavy Duty cable tray with 6mtrs tray cover, including C channel,Coupler, tary Jointer &	LSM 8 1		
13 14 15 16	Supplying & laying 16mm 5 core rubber cable for UPS input /output re routing Supply & installation of 32A industrial sockets with 6mm 3 core rubber cabling Supply , installation & connection of 12 way PDU Normal UK type Electrical DB modifictaion : changing ELCB ,installation 40A 4P MCB, 32A SP MCB GI Heavy duty Cable tray Work:Supply & installation of 100X50mm Heavy Duty cable tray with 6mtrs tray cover, including C channel,Coupler, tary Jointer & fitting	LSM 8 1		
3 4 5 6 7	Supplying & laying 16mm 5 core rubber cable for UPS input /output re routing Supply & installation of 32A industrial sockets with 6mm 3 core rubber cabling Supply , installation & connection of 12 way PDU Normal UK type Electrical DB modifictaion : changing ELCB ,installation 40A 4P MCB, 32A SP MCB GI Heavy duty Cable tray Work:Supply & installation of 100X50mm Heavy Duty cable tray with 6mtrs tray cover, including C channel,Coupler, tary Jointer & fitting Delivery: 1-2 weeks from the date of order confirmation	LSM 8 1		



E	CIVIL WORK			
18 19	Supply & installation 60X60 metallic ceiling tiles Supply and applying two coat fire resistant oil based paint Using brand:jotun for the complete wall & ceiling area 26	30 26		4,300.00
		1	SUB TOTAL	4,300.00
F	CABLE RE ARRANGEMENT- EXSITING RACKS			
20	Rearranging the existing network / power/ fiber cables inside the 42 U racks - 3Nos using cable ties , welcro and cable managing accessories labeling (BROTHER) the cables inside rack if required	LSM		4,500.00
	Note: Additional patch cables if required will be variation order as per actual site requirement While re arranging the cabinets , appropriate patch cables to be arranged by the client			
6			SUB TOTAL	4,500.00
G	ACCESS CONTROL- VANTAGE	1		
21	Standalone access control device with smart card /PIN - HIKVISION DS-K1T802E	LSM		1,000.00
	Door lock with inbuilt door contact with brackets Exit Button with back box Emergency Door Release 12V 5 amps power adaptor EM proximity cards Cabling for acs system with required trunking , Installation of the unit with accessories including door lock, exit switch , EBG & configuration Delivery: 1-2 weeks from the date of order confirmation Warranty:2 years standard manufacturer warranty will be provided			

Payement terms :

 $30\%\,$  advance ,  $20\%\,$  on delivery &  $50\%\,$  balance upon completion.

Warranty : 2 years standard manufacturer warranty will be provided.



Exclusions, Terms & conditions

- 1. Any approval/ certification from any authority is not included in our scope of work
- 2.Except the above any additional work will be considered a variation & the deviation will be charged extra

3.Client has to arrange necessary pass if required to carry out the job

We hope that you find our prices competitive and we look forward to receive your valuable reply. Please do not hesitate to contact us in case of any furthur clarifications.

Thanks and regards

Nishma Dsouza <u>nishma@tncuae.com</u> <u>Tel:04 2505588 Ext:304</u> tncuae@eim.ae , Web: www.tncuae.com



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# Appendix 12 | Waste Management Contract



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