Safety Manual

2021 Season

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Table of Contents

Introduction

The following manual is for the purpose of education on the various safety techniques and procedures that are important for an FRC team. It should be noted that this is not a definitive document and won't cover every possible scenario that will require safe praxis and if possible, any students involved in a situation that requires attention or help should defer to a mentor, site staff (especially at competition) or if the situation is dire enough, the local authorities.

The document is generally divided into 5 general topics: general safety, mechanical, electrical, chemical and other information such as documentation. General safety establishes basic measures and broad practices that should be used for all scenarios. If a certain topic isn't obviously part of the subsequent topics or is not specifically covered, defer to the general safety section. Mechanical safety covers topics that relate to the use of mechanical tools, power tools, and machines. Electrical safety covers protection from and treatment of electrical mishaps and injuries. Chemical Safety refers to how to deal with any type of chemical spill or burn.

Expectations

Expectations of students and mentors are to follow safe procedures enforced by the school, FIRST Safety Manual and this manual. Students are expected to follow the same rules. Be attentive during the meetings and take in what the mentors have to offer. Be able to use common sense and be aware of their surroundings to increase the overall safety of the team. Mentors are expected to do the same, while also teaching and being an

Note:

For the 2021 season, we have added a COVID describing our procedure in how to limit exposure and precautions to take. What actions to take if you do end up being infected.

General Safety

Basics

Safety is everyone’s responsibility, including mentors and students. Follow safe work practices, including safe use of all tools, proper guards and appropriate caution. Do not use tools in dangerous conditions. Lead by example. Use protective equipment (safety glasses, shoes, gloves, hearing protection, etc.)

Physical injuries and medical problems, however slight, need to be documented and reported to your adult mentor. Never use equipment or tools you have not been adequately trained to use. If you don’t understand something, ask before starting to use a piece of equipment.

Maintain a healthy attitude regarding Safety, don't take it for granted. We are trying to save you from harm. Be aware of competition site rules and regulations, they may vary slightly from place to place. Always evacuate upon the activation of a fire alarm, in any location, including hotels you may be staying at.

Personal Protective Equipment (PPE)

Eye and Face Protection

Wear eye protection in the following situations: When doing any work on the robot including grinding, drilling, soldering, cutting. And when there is risk of exposure to flying particles or chemical exposure (such as splashes, splatters, and sprays)

Hand Protection

Hand protection is designed to protect against heat, electrical, chemical and mechanical hazards. Use proper gloves and mechanical tool guards.

Hearing Protection

Use hearing protection devices, such as earplugs, where there are objectionable/questionable sound levels. A Mentor can provide assistance in evaluating high-noise tasks and determining appropriate hearing protection devices.

Clothing

Footwear

Wear shoes that completely cover the entire foot. Shoes must be substantial and have closed-toes and heels to protect against foot injuries, regardless of work location. Flip-flops, sandals, mules, lightweight slippers, etc. are not acceptable when working on or near the robot.

Loose Clothing

Lose clothing such as hoodie strings, ties, baggy clothing could get stuck between an active machine and you causing potential harm. Tuck in the clothing or remove it.

Hair

Tie long hair back or cover it to prevent it from being grabbed by machinery.

Jewelry/Items

Take off/tuck in any pieces of loose jewelry, keychains or items that could potentially be harmful when near machinery.

Location Of Safety Materials

Safety Glasses are located in a green cross drawer in the Main room. The Safety Kit is located by the sink in the Router Work Room. If injured go to the safety kit for alcohol pads and bandages/Gauze and sign out that you have gotten an injury. Fire extinguishers are located by the safety kit and CNC Mill. Battery bucket (spill kit inside) underneath sink in Router Work Room. Additional safety materials under green cross drawer.

Injuries

Minor Injuries

Small Wounds

1. Wash the wound if needed (ex. Metal shavings, grease, acid, cleaner, etc).
2. Apply either hydrogen peroxide or an alcohol pad to the wound.
3. Then put on gauze or bandaid.
4. Reapply bandages/gauze as needed.

Large Wounds

1. Stop the bleeding. If you cut yourself, the first thing you should do is apply pressure with a clean bandage or cloth, and keep that part of your body elevated above the heart, if possible. If not, apply a tourniquet. Once pressure is applied, do not repeatedly remove the dressing to check on the cut – doing so can disrupt the clotting process.
2. Clean the wound (hydrogen peroxide/Alcohol pad/water). Every cut has the potential to become infected, so once you have controlled the bleeding, you should rinse the area with water.
3. Use an antibiotic ointment.
4. Cover the wound. Once you've cleaned the wound and applied antibiotic ointment, dress it with a sterile bandage.
5. Change the dressing if it is soaked in blood.

Splinters

1. Wash the wound
2. Use clean tweezers to remove if it is a small splinter.
3. Apply either hydrogen peroxide or an alcohol pad to the wound.
4. Then put on gauze or bandaid.
5. Reapply bandages/gauze as needed.

Heavy Objects falling on feet/hands

1. Remove the object if it is not impaled in foot.
2. Determine if bones are broken.
3. Apply RICE
    a. Rest: Rest and protect the injured or sore area. Stop, change, or take a break from any activity that may be causing your pain or soreness.
    b. Ice: Cold will reduce pain and swelling. Apply an ice or cold pack right away to prevent or minimize swelling. Apply the ice or cold pack for 10 to 20 minutes, 3 or more times a day. After 48 to 72 hours, if swelling is gone, apply heat to the area that hurts. Do not apply ice or heat directly to the skin. Place a towel over the cold or heat pack before applying it to the skin.
    c. Compression: Compression, or wrapping the injured or sore area with an elastic bandage (such as an Ace wrap), will help decrease swelling. Don't wrap it too tightly, because this can cause more swelling below the affected area. Loosen the bandage if it gets too tight. Signs that the bandage is too tight include numbness, tingling, increased pain, coolness, or swelling in the area below the bandage. Talk to your doctor if you think you need to use a wrap for longer than 48 to 72 hours; a more serious problem may be present.
    d. Elevation: Elevate the injured or sore area on pillows while applying ice and anytime you are sitting or lying down. Try to keep the area at or above the level of your heart to help minimize swelling.

Major Injuries

Electrocution

1. Separate the person from the source of current through non-conductive means. Such as non conductive gloves.
2. Check if the person is still breathing/heart is beating.
3. If heart has stopped, apply CPR

Being lit on fire

1. Stop, drop and roll.
2. Use a fire extinguisher on the person
3. Call emergency services to ensure the safety of the person.

Objects Impaled

1. DO NOT remove the object
2. Apply pressure to slow bleeding

3. Call emergency services

Epipens

1. Get the Epipen/ get someone to call 911
2. Take all objects out of pockets.
3. Remove Blue cap.
4. Place the tip against the middle of the outer thigh
   keep your fingers away from the tip.
5. Drive the injector into the thigh &
   push it in till it makes a clicking sound.
6. Count to approx 10 secs.
7. Then remove from the thigh.

Eye Injuries

Minor Eye Injuries

1. Blink several times and allow tears to flush out the particles.
   If this does not work, move onto the next step.
2. Wash the eye in the sink

Major Eye Injuries

- Gently place a shield (protective cover) over the eye.
  The bottom of a paper cup taped to the bones surrounding the eye can
  serve as a shield until you get medical attention.

Chemical Eye Injuries

1. Immediately flush the eye with plenty of clean water.
2. Seek emergency medical treatment right away.
3. While waiting for medical care, continue washing eyes out. Cover eye to decrease light sensitivity when not washing
    a. Check MSDS for information on the chemical to give to paramedics
        i. Such as information on what kind of chemical it was.
4.

Fire Safety

When To Flee Fires

- Involves flammable solvents
- Has spread over more than 60 square feet or 5.6 square meters, or half the size of a car interior (best practice)
- Is partially hidden behind a wall or ceiling
- Cannot be reached from a standing position
- If you cannot fight the fire without respiratory protection
- Heat is too intense to get within the effective range of the extinguisher (generally 3 to 4.5 meters or 10 to 15 feet)
- You have to crawl on the floor due to heat/smoke
- Smoke is quickly filling the room

Responding To Large Fires

1. Stop what you're doing.
2. Sound the alarm and notify people.
3. Identify a safe evacuation path.
4. Evacuate the immediate area.

When To Fight Fires

The basic questions you’re gonna want to ask yourself:

- Is the fire too big for a portable fire extinguisher?
- Is the air safe to breathe?
- Is the environment too hot and smoky?
- Is there a safe evacuation route?

When the fire:

- Is limited/contained to the original material ignited
- Has flames no higher than your head

Or when:

- Room temperature is only slightly increased
- Visibility is good
- No special PPE (personal protective equipment) is required

Types Of Fire Extinguishers

Our Fire Extinguishers are rated for ABC, which uses dry chemicals.

Types of Fire:

Class A: Ordinary Combustibles Ex: Trash, wood, paper, cloth,
Class B: Flammable liquids (Ex: oils, grease, gasoline, paints)
Class C: Electricity (Ex: live wires, outlets) NEVER USE WATER
Class D: Combustible metals (Ex: Magnesium, potassium)
Class K: Cooking oils, trans-fats, or fats in cooking appliances

How To Fight Small Fires

Use a Fire extinguisher for small containable fires, for the correct fire. Using it on a can make the fire worse. The PASS technique has 4 steps to it.

PULL the Pin.
AIM toward the base of the fire.
SQUEEZE the handle
SWEEP from side to side at the base of the fire

Evacuation Of Building

People in room W112 (The engineering lab, and its sub rooms) are to leave in an orderly fashion. Following evacuation protocols/maps posted in the room.

Mechanical Safety

Tools

Hand Tools

Before using any tool, check to see if it is in good condition. Don’t use defective, dull, or broken tools. Don’t put them back on the shelf; remove them from service & notify a mentor so the tool can be replaced or sent for repair. When using a tool, place the work on a bench or hard surface rather than in the palm of your hand. When using knives/blades, direct your cutting strokes away from your hand & body and be aware of those around you.

Store sharp-edged or pointed tools in a safe place. When carrying tools, cover the point or any sharp edges. NEVER carry sharp tools in your pocket. Don’t leave tools on overhead work surfaces. They may fall and strike someone below. Store equipment in a location where it will not create a safety hazard/get damaged.

Power Tools

DO NOT USE TOOLS YOU ARE NOT TRAINED IN. Ask a mentor to get trained. If the tool drills or cuts, yell DRILLING or CUTTING, before activating the tool.

DRILLS/DRILL PRESS

Never drill an object that is not clamped. Never have your hand directly underneath where you're drilling. Always drill straight forward/backwards.

ANGLE GRINDERS

MENTOR USE ONLY. Reason is that the grinding/cutting disks can explode into shrapnel if used wrong

JIGSAW

Don't not put your hands near the saw.

CHOP SAW/Abrasive Saw

Anything hard but steel on chop saw. Steel only on an abrasive saw.

Power Tools Cont.

GRINDER/POWER SANDER

This will suck in any loose clothing/hair. Use water to cool your object. Use clamps for smaller objects. These will create sparks, be weary of flammable materials near you.

DREMEL

Spins a sanding/cutting blade, Be weary of sparks going onto flammable materials.

PORTABLE TABLE SAW

TRAINED STUDENTS AND MENTORS ONLY. This can inflict harm onto the user if not used responsibly.

SAWZALL

MENTOR USE ONLY

HAND HELD CIRCULAR SAW

Clamp down whatever you're working on. When done cutting, keep the blade still and let it stop on its own then lift it out of what you're cutting. Do not use it if you are not trained.

Machines

All machines here require two mentors (except the bandsaw) that know you are using a machine & are watching you. Cover any loose clothing/hair.

CNC MILL

CNC ROUTER

LATHE (Do not leave the key in the chuck)

BANDSAW

DO NOT STICK YOUR HANDS NEAR ANY POWERED ROTATING PIECE OF THE MACHINES WHILE ON.

Electrical Safety

Risks Of Ampere

Effects of AC Electricity
More than 3 mA - Painful shock - cause indirect accident

- More than 10 mA - Sustained Muscle contraction – "No Let Go" danger
- More than 30 mA - Lung paralysis, usually temporary
- More than 50 mA - Ventricular fibrillation,(when the heart quivers instead of pumping due to disorganized electrical activity) usually fatal
- 100 mA to 2 A - Certain ventricular fibrillation, fatal
- Over 2 A - Heart paralysis/Severe burns

Heart stops pumping blood, no blood pumping = no oxygen, no oxygen for 4 mins = permanent brain damage. No oxygen for a total of 8-10 mins can cause death. This is where CPR would then be applied by someone trained in it.
CPR Process:

Lay the person on a flat/firm surface. If there is no pulse but is breathing, just do chest compressions 2"- 2.4" down at a rate of 100-120 per minute. If not breathing do 30 chest compressions, Tilt the head back and lift the chin up. Pinch the nose shut then make a complete seal over the person's mouth.

Blow in for about 1 second to make the chest clearly rise. Give 2 rescue breaths, one after the other. Note: If the chest does not rise with rescue breaths, retilt the head and give another rescue breath. Then continue chest compressions at a rate of 100-120 a min. (Sing Staying alive to keep Rhythm).

Batteries

How Charge Batteries

Keep the battery-charging area clean and orderly. Battery chargers can fail without proper ventilation. Do not short out the battery terminals. If metal tools/parts contact the terminals simultaneously, it will create a direct short circuit. This may cause high heat to develop in the battery terminal/part/tool area and the battery could explode and the conductive metal tool to melt.

Battery is being charged when the indicator light is red (displayed on the charger). It is fully charged when the light is green. You do not have to unplug the batteries when they are full as the chargers are smart chargers and will stop supplying power to the battery. Also there is no risk in plugging in a battery while the charger is on as it will not supply power until the battery is in and needs to be charged.

How To Clean Up Battery Spills

Necessary Safety Materials

- A box of sodium bicarbonate (baking soda)mto neutralize any exposed acid electrolyte. In the orange bucket.
- A pair of acid-resistant rubber or plastic leak-proof gloves to wear when handling a leaking battery. In the bucket.
- A suitable non-metallic leak-proof container in which to place the defective battery. This is the orange bucket.

Procedure for Handling a Leaking Battery

1. Notify Mentor
2. Put on the Nitrile gloves/Safety Glasses before handling the battery.
3. Neutralize it by pouring the sodium bicarbonate on all wetted surfaces. When it stops fizzing it is neutralized
4. Place the battery in a leak-proof container for removal
5. Be sure to neutralize any acid on the gloves before removing and storing them
6. Seek medical attention if skin came into contact with any chemicals
7. Properly dispose of the battery, which is now a hazardous material
8. Clean up the residue left behind, start with throwing away paper towels to pick up the gummy mess. Then use a rough item like steel wool or a toothbrush to scrub anything up that won't come off with the towels.

How To Remove/Replace Robot Battery & How To Handle Them

Press the red button, the black switch will flip out completely when done probably. If the switch is not in an open condition it will still have the ability to flow current through it. Disconnect the battery connectors from the Robot connectors.

DO NOT lift the battery by the cords, but by the battery body with TWO hands. Then lift out and replace the battery with a fresh one. Preferably one that is 130% Charged. Check for/with blue flag/battery Beak

Electrical Outlets and Cords

Split Cords/ Open circuits

Ensure all equipment is in safe working condition, cords not frayed, or cut. Routinely inspect equipment cords. DO NOT use an outlet that is exposed. The outlet cover plate is an important safety device because it covers everything in the electrical box. Including the electrical terminals (screws) on the sides of the outlet & the bare ends of the circuit wires. Touching these can give you a powerful shock and cause any of the effects listed before.

Daisy Chains & Why Not To Use Them

DO NOT “daisy chain” – plug a power strip into another power strip.
Avoid the following electrical power supply setups to prevent overloading:

- Extension cord plugged into another extension cord.
- Extension cord plugged into a power strip.
- Multi‑device receptacle plugged into a power strip or extension cord.

The reason being If there were no breaker in the circuit, an overload would cause the circuit wiring to overheat, which could melt the wire insulation and lead to a fire. If there is a fire, use a fire extinguisher. Different circuits have different load ratings so that some circuits can provide more electricity than others.

Chemical

Chemicals come in many forms, varying in ways that can be harmful to a human. Each variant has different conditions under which it can become harmful. Proper storage and use of the chemicals is needed in order to prevent injuries. If an injury does occur, check the MSDS of that chemical for treatment. There is a physical copy in the engineering lab, but also online pdfs are available in the google drive under FRC => 2021 => Safety => MSDS. They are sorted alphabetically. If a serious chemical injury does occur and emergency care is required, give the emergency services the chemical name and the MSDS of the chemical.

It is important before using a chemical to check the proper usage and first aid guidelines to prevent and minimize the risk of injuries if one is to occur.

Competition

At competitions, there are 3 main areas: The fields, the stands, and the pit. The field is where robots are brought to play the game. At events there are practice fields and the official field. The stands are where your team sits and enjoys the game, cheering on your fellow competitors. The pit is where your robot is stored and maintained in between matches. It is a 10’x10’x10’ cube that stores all the tools and excess materials. Safety glasses are required in the pits and field. If you are acting unsafe in these areas, you may be escorted out of pits and possibly the event itself if you are a danger to others. Stay aware of your surroundings, especially in the pits and field, as these provide the most risk to you. When traveling to a different location, tell someone and use the buddy system. You are not to leave the venue grounds unless given permission to. Such as a designated lunch break.

Pit

The pit is a small area, a maximum of 7 people are allowed in there. Keep the space in front of the pit clear of people and objects to prevent cluttering and jamming the walkway. When walking to/from the pit keep aware of your surroundings, if a robot is moving through stand towards the edges of the walkway and let them pass. When transporting the robot, politely keep others aware of your movement. Telling people robots are moving through.

Safety materials such as the MSDS are stored here in an easy to access location such as a shelf at the front of the pit. The safety kit will also be located here.

Hotels

If the team is staying at a hotel and attending an event outside of Rochester it is important that the team shows Gracious Professionalism. No disrupting other guests such as banging on walls or screaming. No boys in girl’s rooms and no girls in boy’s rooms. All students must be in their rooms at a designated time and may not leave unless it is an emergency. When traveling around, employ the buddy system and tell someone where you are going. This is to limit the dangers of someone being kidnapped or taken against their will.

Emergencies

In case of an emergency such as a fire, stop what you are doing, and start heading to the nearest exit in an orderly fashion. Don’t run people over. Meet up at the designated meeting point and await for mentors to arrive.

If a suspicious person is near you, try and get away from them and head back to a populated area such as the stands. This will limit their actions in the public. If someone is presenting themselves as a danger, call 911/ the local authorities and report the emergency.

Safety Documentation

MSDS

The purpose of the Material Safety Data Sheet information is to convey chemical safety and hazard information to the end user (members exposed to hazardous chemicals, members who store dangerous chemicals, and emergency responders such as: firefighters, hazardous material crews, and emergency medical technicians). Material Data Safety Sheets are a critical component of the United States OSHA Hazard Communication Standard, which states that “anyone who might handle, work with or be exposed to hazardous materials must have access to the Material Safety Data Sheets.”

An MSDS sheet is a 16 or 9-section safety document detailing the toxicity, use, storage, handling and emergency procedures of hazardous substances. The MSDS describes chemical safety and hazards that may be involved with the product and safety measures that should be taken in order to minimize or avoid adverse outcomes that may result from chemical exposure, chemicals in the workplace, improper storage or handling of a hazardous substance, and chemical hazards. Material Safety Data Sheet information is intended to provide members and emergency personnel with safety measures for handling or working with hazardous substances in a safe manner.

MSDS Symbols

- Skull and Cross Bones (Appendix B, Image A)
    - Acute toxic
- Health Hazard (Appendix B, Image B)
    - Carcinogen
    - Mutagenicity
    - Reproductive toxicity
    - Respiratory sensitizer
    - Target organ toxicity
    - Aspiration toxicity
- Flame (Appendix B, Image C)
    - Flammable
    - Pyrophorics
    - Self-Heating
    - Emits flammable gas
    - Self-reactive
    - Organic peroxides

- Exclamation Mark (Appendix B, Image D)
    - Irritant
    - Skin sensitizer
    - Acute toxicity
    - Narcotic effect
    - Respiratory tract irritant
    - Hazardous to ozone layer
- Flame over circle (Appendix B, Image E)
    - Oxidizers
- Gas cylinder (Appendix B, Image F)
    - Gases Under Pressure
- Exploding bomb (Appendix B, Image G)
    - Explosives
    - Self-Reactant
    - Organic peroxides
- Environmental hazard (Appendix B, Image H)
    - Aquatic Toxicity
- Corrosion (Appendix B, Image I)
    - Skin Burns
    - Eye irritant
    - Metal corrosion

Sections of the MSDS (ANSI Format)

1. Product and company identification
2. Hazard identification
3. Composition/information on ingredients
4. First aid measures
5. Fire fighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure control/personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological Information
12. Ecological information
13. Disposal considerations
14. Transportation information
15. Regulatory Information

16. Other information

Injury Reports

Minor Reports

For smaller injuries that cause no lasting damage. Online form can be found in google drive. There is also a physical sheet that can be used in the safety kit. Just requires the full name, date and time, and the injury.

Major Reports

This report is for any incident involving a major injury such as loss of a limb or damage of machinery. It requires more information to be filled out. This requires The same information as the minor report but also additional information such as witnesses, a description of the incident and parent information. These are either printed out or done in an online form.

COVID

How It Is Transmitted:

COVID-19 spreads mainly from person to person through respiratory droplets. Respiratory droplets travel into the air when you cough, sneeze, talk, shout, or sing. These droplets can then land in the mouths or noses of people who are near you or they may breathe these droplets in.

Importance of a Mask:

Masks are a simple barrier to help prevent your respiratory droplets from reaching others. Studies show that masks reduce the spray of droplets when worn over the nose and mouth.

You should wear a mask, even if you do not feel sick. This is because several studies have found that people with COVID-19 who never develop symptoms (asymptomatic) and those who are not yet showing symptoms (pre-symptomatic) can still spread the virus to other people. Wearing a mask helps protect those around you, in case you are infected but not showing symptoms.

Types of Masks to Use:

- Masks that fit properly (snugly around the nose and chin with no large gaps around the sides of the face).
- Masks made with breathable fabric (such as cotton).
- Masks made with tightly woven fabric (i.e., fabrics that do not let light pass through when held up to a light source).
- Masks with two or three layers.
- Masks with inner filter pockets

Not Recommended Masks:

- Masks that do not fit properly (large gaps, too loose or too tight).
- Masks made from materials that are hard to breathe through (such as plastic or leather).
- Masks made from loosely woven fabric or that are knitted, i.e., fabrics that let light pass through.
- Masks with one layer.
- Masks with exhalation valves or vents.

- Wearing a scarf/ski mask as a mask.
- Face shields
    - Mainly used to protect your eyes, large gaps below and alongside the face allow respiratory droplets to escape and reach others around you.

How to protect yourself/others:

- Wear your mask over your mouth and nose.
    - If disposable, throw it away in the trash.
    - If reusable, wash after use.
- Avoid Touching eyes, nose and mouth with unwashed hands.
- Wash your hands frequently with alcohol-based hand rub or with soap and water
- Limit your physical contact with others.
- Avoid close contact with people who are sick.
- Cover your cough or sneeze with your sleeve or a tissue.
- Clean and disinfect frequently touched objects and surfaces.
- Socially distance 6ft or more when possible.
- Stay home if you are sick.

Symptoms of COVID

- Fever
- Dry cough
- Tiredness
- Loss of taste or smell
- Aches and pains
- Headache
- Sore Throat
- Nasal congestion
- Red eyes
- Diarrhea
- Skin Rash

If you even have minor symptoms STAY HOME and self-isolate. If you have a fever, cough and difficulty breathing seek medical attention immediately. Call first.

In-Person Meetings:

Before The Meeting:

The students that plan on staying in the building after from 2:15 till 4:30: The field house is open until at least 3:30. If the field house gets closed (security leaves before 4:30) you are to move to the STEM CENTER ATRIUM be mindful of Sammie's cleaning, try to stay in the upper part of the atrium, closer towards the stairs. Students are NOT allowed into any of the classrooms. You should not leave the building, if you leave even to speedway, you will need to wait for Mr. Buell to arrive at 4:30 so plan accordingly.

Students who leave the building between 2:15 and 4:30, if you leave the building for any reason (including speedway/tops) you won't be allowed into the building until Mr. Buell arrives to let you in. You will also need to fill out a second COVID screening form (read on for more details).

Entrance Procedures:

When Mr. Buell arrives, he will be arriving through the main entrance to get COVID screening forms. He will make his way over to the STEM center and open up the Engineering lab, The W206 computer lab (the lab next too Maxwell's room), The old CAD lab (it's now a conference room OMA, Safety, and other leadership meetings can happen in), and the Programming conference room. He will station himself with the screening forms and the attendance roster at the Campus ministry entrance (the entrance we always use).

Signing Into The Building:

Those staying after AND NOT LEAVING THE BUILDING will see him to sign in on the attendance roster, he will mark that you filled out the Covid screener on your way into the building in the morning for school.

Those arriving from outside the school, both students and mentors, will enter the building, fill out the PAPER screener (not the daily pass), and upon successful completion of the form, Mr. Buell will store your form in an envelope he will file all the days screeners into, and he will sign you in.

AS SOON AS YOU HAVE SIGNED IN ON THE ROSTER, YOU WILL REPORT TO THE ROOM YOU'VE SELECTED TO BE IN (This is why you are asked what you want to do on the registration form **there will be one for every meeting**)

Meetings will be held from 4:30-6:15pm on Tuesdays and Thursdays.

At 6:00

EACH ROOM will clean up and join a zoom link so that all 4 rooms are linked, we will receive a debrief from what each room accomplished, and come up with a general plan on what we will cover at our next meeting. Once this meeting has concluded, we will dismiss room by room so there isn't a flood at the exit.

By this time it is 6:15, everyone is out of the building.

Virtual Meetings:

4 Links to look out for:

1. Link to the CAD and design course zoom Roger and Paul will be hosting in W206 (this will run from 4:30 till 6:15)
2. Link to the zoom Omar will have with Dylan in W110 (this will be up to @S- Omar Nadeem and @Dylan S. to decide how long and when it will run, most likely between 5:15 and 6:00)
3. Link to the engineering lab: (4:30 till 6:00) this link will start as a general evaluation of the bot, programing will look at it and evaluate what they want to do to it, they will try to find mechanical flaws as well as electrical flaws. At 5:15, electrical will take over the zoom and it will become and electrical specific zoom, going over the electrical system and cleaning/ fixing the bot

4. Link to the programing room: (5:10 till 6:00) at 5:15, after evaluating the bot, programing will move into the campus ministry conference room to discuss what they want to do on the bot.

At 6:00pm, all remote users should join Roger & Paul's Zoom/Slack for a closing meeting.

Online Attendance Forms:

Attendance forms must be filled out even if you are attending virtually or not going to be there. This is to know who is attending and being an active member and who is in-person.

Appendixes

Appendix A:

Incident Reports

Minor Incident Report

Online Form:
https://docs.google.com/forms/d/e/1FAIpQLSflg9VBRLAaGHckyXGPIz1ccQ2R9TFxTtWlQmobx_Gi5ygCWA/viewform?usp=sf_link

Physical Sheet:
https://docs.google.com/document/d/186ytB3BS20QzfZOzyXQbl9b9-4mcLlvmps-OBhCbgFs/edit?usp=sharing

Safety Injury Sheet

Name	Injury Location	Date	Time

Major Incident Report

Online Forms

Adult:

https://docs.google.com/forms/d/1IBlEBusN7HWKQxl1hYt3SHxiupGmSTfy0U-HsaAfs9g/edit?usp=sharing

Student:

https://docs.google.com/forms/d/1rK-B09HMAXcIXVTYGKkuW7YtA2f5UE1a4VAMXkMxb0k/edit?usp=sharing

Physical Forms

Adult:

https://docs.google.com/document/d/1OQomy90FCL1x_Q5bf3usWB42g1EBS9ItzNtomHSKBR4/edit?usp=sharing

Student:

https://docs.google.com/document/d/1sKST-MUvugFC4Di_qwF4MYMZedI8lOVzJVLyG4ortqc/edit?usp=sharing

Adult/Mentor Major Incident Report

Adult Information:

Name of Adult:_____ Age:_____

Contact Information:

Email:_____

Phone #:_____

Incident Information:

Date and Time of Accident:_____

Location (Classroom, recess, dismissal, etc.):_____

How accident occured and description of injury (Explain fully):_____

_____

_____

_____

_____

Was Any Equipment Damaged: Yes or No (Circle one)

Explain: _____

_____

First aid given:_____

By who: _____

Adult Responsible For Incident: _____

Signature and Position:_____ Date:_____

Lead Mentor Notified:_____

Adult seen by Nurse or Doctor (Circle Which Apply)

Witness to accident:_____

_____

_____

Comments:_____

_____

Student Major Incident Report

Student Information:

Name of Student:_____ Age:_____ Grade:_____

Email:_____

Parent or Guardian Phone #:_____

Parent or Guardian Email: _____

Incident Information:

Date and Time of Accident:_____

Location (Classroom, recess, dismissal, etc.):_____

How accident occured and description of injury (Explain fully):_____

_____

_____

_____

_____

Was Any Equipment Damaged: Yes or No (Circle one)

Explain: _____

_____

First Aid given:_____

By Who: _____

Teacher/Mentor or Person responsible for student at time of accident:

Signature and Position:_____ Date:_____

Parent or Guardian notified:_____

Student seen by Nurse or Doctor (Circle Which Apply)

Signature of Nurse:_____Date:_____

Witness to accident:_____

_____

_____

Comments:_____

Appendix B: MSDS Chemical Symbols

A.  Skull and Crossbones

B.  Health Hazard

C.  Flame

D.  Exclamation Mark

E.  Flame over circle

F.  Gas Cylinder

G.  Exploding Bomb

H.  Environmental Hazard

I.  Corrosive Material