FRC Team 4153 – Project Y ROBOTICS SAFETY RULES

YOU are responsible for your own safety and proper robot operation. This general safety training allows you use hand tools and hand operated power tools in the shop.

You *cannot* operate the drill, lathe, mill, grinder, band saw, chop saw or any machine tools if you have not been separately trained in their safe use. If you are new to metal working, get in the habit right from the start of rigorously following good safety practices. Safety sheets specific to machine shop practice and individual machinery will be furnished on an individual basis if such work is to be undertaken.

Before You Begin

- Wear closed toes shoes in the shop, working with tools, or working on the robot—a heavy robot running over bare feet could cause injury.
- In the shop and when working around moving objects tie back long hair so it can't get caught in the rotating parts. Think about what happens to your face if your hair gets entangled.
- Wear short sleeve shirts, if possible, or shirts with snugly fitting cuffs if long sleeve. Loose sleeves can catch on rotating gears and sprockets and quickly pull your hand or arm into harm's way.
- In the shop remove rings, wrist watches, necklaces, chains, ear buds and other jewelry so that they don't get caught in the rotating machinery.
- Remove iPhones, iPods or other earpiece dependent electronics...you must be able to hear what is going on.
- ALWAYS wear eye protection when in the shop, working with tools, soldering, or working on the robot -- Don't take chances with your eyes.

General Shop Safety:

- Don't Work Alone. Do not be in the shop, use tools, or work on the robot without a mentor. Always make sure you have a shop buddy or mentor to help.
- No horseplay will be tolerated on the team. You will be asked to leave if you engage in such behavior.
- Only use tools you have been trained on.
- Do not distract someone involved in a task or become DISTRACTED when conducting a task.
 CONCENTRATE on the job at hand, not on some conversation.
- Do not eat or drink in the machine shop with the exception of bottled water with a cap.
- Hearing protection (i.e. ear muffs) is required when using equipment in the cutting room. Hearing protection is encouraged whenever using power tools.

Rev. 3 09/16 Page 1

- Don't wear gloves when using a free-standing machine, as they can get caught in the machine. Gloves are allowed and often useful when working with hand tools.
- Make sure your workpiece is securely held with clamps or vice grips. Do not use your hands to clamp on a drill press.
- Do not leave your work until it's in a safe condition.
- Never put fingers in a position where they can get caught in gears and sprockets or in the line
 of fire.
- Remove chips with brushes, not with your hands or compressed air.
- While working with adhesives or chemicals, you must wear gloves.
- Always clean up your workspace and return tools when the task is complete.

Robot Safety:

Signature:

- Announce to others when you turn on or when you enable the robot.
- Disable the robot before sticking hands into the robot chassis.
- Always turn off robot and unplug main battery when working on gears, chains and other drive train components.
- Do not carry the robot when the robot is powered up.
- Batteries contain stored electrical energy and sulfuric acid. Do not handle the battery if it is cracked, bulged, or visibly damaged.
- Use the buddy system to carry heavy objects and lift with your legs and not with your back.
- Be sure no one is in harm's way when operating the robot. Drive safely!

Watch out for each other! Remind your teammates if you see behaviors or actions that do not meet these safety standards.

Report any injuries, accidents, or near misses to a mentor immediately. It is important that we learn from mistakes.

Report damaged tools, equipment or anything that seems out the ordinary to a mentor. Ask questions if you are unfamiliar.

I have read and understand these rules and will use them in my work on Team 4153-Project Y activities.

Printed name:

Date _____

Rev. 3 09/16 Page 2