FIRST and HHS Robotics Team Shop and Laboratory Safety Policy

INTRODUCTION:

The FIRST Robotics program enables students enrolled in the Highland High School Robotics Program to have access to certain areas in schools, machine shops, workshops, off-site buildings etc. under certain conditions. Every effort is made to make these areas as safe as possible. However, the use of any power or hand tools is inherently dangerous and caution should always be taken. The following is a list of requirements and safe operating procedures that any Highland High School Robotics team member must follow when using these facilities. After reading the following information, please sign the attached form in the indicated space(s) and return one copy to the team coordinator. Unless this sheet is signed and received by the team coordinator, you will not be allowed to use the shop areas.

GENERAL POLICY:

1. The laboratories and shop are available to students during hours that our mentors or other faculty member designated only. There will be no use of the lab/shop areas when a qualified faculty member is not present to supervise. Prior arrangements must be made with the Faculty Advisor if the laboratory is to be used after hours but this option is available only if a qualified faculty member agrees to be in attendance to supervise the student(s).

2. Always wear safety glasses in all shop and lab areas. No exceptions. Glasses are available in all labs and shops for your use while in the shop. Please return them when finished. Depending on the type of work you're doing, you may need additional protective gear. See a team mentor or team coordinator for a recommendation.

3. No student is allowed to use the FIRST lab/workshops until he/she has attended the safety orientation training provided by our team mentors.

4. No student is allowed to use the machine shop areas until he/she has done the following:

   Taken the machine shop tutorial course posted to the Highland High School Robotics website http://www.hhsrobotics.org

   All students must take the Introduction Safety video. Additionally, students wishing to use the belt sander, grinder, drill press, or band saw must complete those sections of the tutorial.

   - Any student wishing to use the lathe or milling machine must also review the sections covering those tools, and must demonstrate their ability to use the tool to our mentors, in a session arranged in advance by the appropriate faculty. The mentors signature is required for successful completion of the certification. All students are encouraged to view this informative site in its entirety.

   A list of those who are in compliance will be maintained by the Team Coordinator, and distributed to the mentors indicating who may use the labs and machine shops, and what tools they are allowed to use.

5. The Highland High School Robotics Team has the right and responsibility to refuse the use of the laboratory to any student who does not follow safe operating procedures, does not

know how to use the equipment and refuses to accept instruction, or who is caught using the facilities without supervision. The mentor(s) will report these problems to the Team Coordinator or, and appropriate action will be taken. Any student found deliberately breaking the policies set forth in this Policy will be barred from further use of the facilities.

6. Students should identify the location of exits and telephones when first entering any of the work areas.

7. Use common sense. If an unsafe condition exists - leave the area and notify the responsible person. If you feel uncomfortable using a piece of equipment, please ask the mentors for help, or take a break and come back.

8. Improper behavior in the shop areas will not be tolerated. These areas are not playgrounds. These areas require your full attention when you use them, *and they are not to be used as social gathering areas.*

9. No food, beverage, or smoking is allowed in the labs/workshops. Use of stereos, MP3 players, and cell phones in the machine shop is expressly prohibited and will result in disciplinary action.

10. Do not use any broken or unsafe tools. Report any unsafe conditions to the mentors in the area.

11. If you do not know how to use a tool or how to perform an operation, ask the mentor for assistance. Due to the heavy work load, the mentor may ask you to arrange a time for the instruction, or may suggest that he will do the work himself.

12. Never work alone. The "buddy system" provides a large measure of safety, and is a requirement.

13. In case of an accident, follow the CHECK, CALL, CARE procedure:
    - **CHECK** the area to make sure it is safe and then check the victim to see what is wrong.
    - **CALL** for help immediately (call **911** for all emergencies). Calling for help can be more important than assisting the victim. You need to get trained help on the scene as quickly as possible.
    - **CARE** for the victim if you are able. After help has arrived, notify the mentors. Once the situation is under control the following people should be contacted:

FIRST Shop and Laboratory Safety Policy Agreement Form

I have read, and I agree to abide by, the "*FIRST Shop and Laboratory Safety Policy*" of the Highland High School Robotics Team.

Use of workshop or lab: I have attended the provided safety orientation training or an equivalent (circle: Safety lecture, Safety video series, Other: _____)

Signed :_____ Date: _____

Use of Hand / Power Tools: I have viewed the hand-tools safety videos and read the safety introduction at the on-line tutorial at http://www.hhsrobotics.org

Signed : _____ Date: _____

Faculty Advisor Approval to use these tools: _____

Use of Machine Shop: I have performed the on-line tutorial at http://www.hhsrobotics.org and have completed the following sections (&/or their equivalents on the below web-site):

Section	Completed
Introduction	_____
Safety	_____
Physics	_____
Measurement and Layout	_____
Belt Sander	_____
Grinder	_____
Band Saw	_____
Drill Press	_____

I wish to use the lathe and/or milling machine. I have reviewed the information on these tools on-line at http://www.hhsrobotics.org, and have demonstrated an acceptable level of skill in using these machines:

Tool	
Lathe	_____
Milling Machine	_____

Signed : _____ Date: _____

Mentor Approval to use these tools: _____

(Please return the completed form with the appropriate signatures to the team coordinator. Please note that you must do this before you have access to the workshops and equipment.)