Lafayette’s Structural Engineering Laboratory (LSEL)
General Safety Rules

Basic Rules – ALWAYS!
1. SAFETY GLASSES at all times (even when no shop work is being done).
2. HAIR must be tied into a tight bun if the hair is long.
3. SHORTSLEEVE shirts, LONG PANTS, heavy-duty Construction BOOTS.
4. No baggy clothing.
5. No dangling jewelry (e.g., hoop earrings, exposed necklaces).
6. No student may work under the influence of DRUGS or ALCOHOL.
7. Students are not allowed to work alone.
8. All equipment requires specific training from Prof. Kurtz or an Engineering Technician.

Welding Rules
In addition to the Basic Rules, above:
1. Welding mask, welding gloves, welding jacket must be worn.
2. Welding screens must be up to protect others.
3. Area must be free from combustibles.

Grinding Rules
In addition to the Basic Rules, above:
1. Full-face mask, welding gloves, welding jacket must be worn.
2. Welding screens must be up to protect others.
3. Area must be free from combustibles.

Supervision
Machine Tool Use:
NO STUDENT MAY USE MACHINE TOOLS WITHOUT SUPERVISION. In the LSEL, the MACHINE TOOLS are the Marvel Bandsaw and the Drillpresses. To use Machine Tools, students must be supervised by either Prof. Kurtz or an Engineering Technician.

Hand Tool Use:
• Students in the CE311 class may only work in the LSEL under the supervision of either Prof. Kurtz or an Engineering Technician.
• Senior students who have taken CE311 may use hand tools (non-machine-tolls) without supervision.

Machine-Specific Training
All powered equipment requires specific training. The list of equipment that requires specific training is found in Appendix B. Training generally consists of receiving personal instruction from Prof. Kurtz or an Engineering Technician.

Penalties
Minor infractions will result in a warning on the first occurrence, followed by temporary suspension of laboratory access on the subsequent occurrence. Examples of minor infractions include: failure to wear safety glasses in the LSEL, failure to wear gloves for equipment requiring gloves, failure to clean equipment when work is completed, failure to fully shield a welding area, etc.

Major infractions will result in the immediate suspension of the student from laboratory access. Major infractions include: reckless misuse of equipment, horseplay, or any activity that poses an immediate threat to others.

Permanent expulsion: any student who attempts to work in the LSEL while under the impairment of alcohol or drugs will be permanently banned from the facility.
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Safety Equipment
1. The first-aid kit is mounted to the wall, immediately adjacent to the hallway entrance to room 111. Anyone working in the lab must know the location of the first-aid kit.
2. The fire extinguisher is mounted to the wall, immediately adjacent to the hallway entrance to room 111. Anyone working in the lab must know the location of the fire extinguisher.
3. The oil-spill kit is located under the Clausing drill press. Any oil spilled on the floor must be immediately cleaned up.
4. Earplugs are located adjacent to the first aid kit. Earplugs are required when using the impact wrench, bench grinder/sander, or hand-held grinder.

Screens
1. Signs in the LSEL clearly indicate that welding occurs in the lab. For this reason, outside doors must be closed at all times.
2. The student who welds or grinds is responsible for moving screens to shield other people from sparks or welding flashes. Free-standing and bench supported screens are available.

Miscellaneous
1. Students will not work at heights above 6'-0” from the floor unless using a locked ladder or being assisted by harnesses.
2. No horseplay in the lab is permitted. Fabrication and testing equipment can be dangerous.
3. Loud music is not permitted in the lab.
4. No headphones/earbuds connected to a music source are allowed while operating power tools/equipment or while conducting tests.
5. Faculty, technicians, and other students shall immediately correct any obvious violation of safety rules that they notice. If faculty, technicians, or other students have any concerns about LSEL safety or safety policies they should immediately inform one of the LSEL faculty or one of the Engineering technicians.
6. Users are responsible for immediately notifying the LSEL Director of any damaged equipment or tools. Users should never use equipment or tools that have been damaged. Every piece of equipment and/or tool should only be used for its intended purpose and only in the manner the user was trained to use the equipment.
7. Practice common sense. If you are unclear about how to do something, don’t do it. If you have any doubt about proper use of equipment or about any of the LSEL safety rules, consult personnel working in the lab.

Housekeeping
The lab area must be kept clean. It is impossible to maintain safe and high quality work in a messy environment. At all times:
1. Floor will be clear of tripping hazards.
2. Tools and parts that are not immediately needed will be put away.
At the end of each work period, students must budget 15 minutes to assure that the following is always done.
1. All tools must be returned and restricted equipment must be locked to prevent unauthorized use.
2. Floors must be swept.
3. Tables will be cleared and swept. Tables are not to be used for long-term storage of parts.
4. The drill presses, lathe, and bandsaw will be swept clean of all debris.
Appendix A: Compliance Form

LAFAYETTE STRUCTURAL ENGINEERING LABORATORY

I have read, understood, and will comply with the rules outlined in the Lafayette Structural Engineering Safety Rules. I will take full responsibility for any action that may happen to or be created by myself and others while using the Civil and Environmental Engineering Laboratories. I understand that the use of the equipment listed below (Appendix B) requires more specific training.

STUDENT INFORMATION:

________________________________________________ _____________________________
Student Name (print)       Date

________________________________________________
Student Signature

Appendix B: Equipment List

The following equipment requires specific training prior to use by a student.

- Clausing drill press
- Clausing drill press with milling table
- Concrete mixer
- Bench grinder/sander
- Hand-held grinder
- Marvel band saw
- Magnet drill press
- Makita chop saw
- MIG welding machine
- Milwaukee portable band saw
- Overhead crane and hoisting
- Pneumatic impact wrench
- Riehle 160-kip universal machine
- Riehle 400-kip compression machine
- Riehle 60-kip universal machine
- TIG welding machine
- Tube-notcher