HELP!? 

- **TAs** – This should always be the first stop.  
- **Lab Coordinator** - ECEB 2044 - [cjsmith0@illinois.edu](mailto:cjsmith0@illinois.edu)
- **Electronics Shop** – ECEB 1041 - [eshop.ece.illinois.edu](mailto:eshop.ece.illinois.edu)
  - PCBs
  - Kits
- **ECE Machine Shop** – ECEB 1047
  - Mechanical Fabrication
- **ECE Supply Center** – ECEB 1031
  - Electronic Components
Lab Policies

• **No working alone!**
  Students must work in pairs.
• No food or drink
• Do not remove equipment from lab
• When AC wall potential is used an instructor or TA must be present.
Keep it clean

• NO FOOD IN LABS!
  • Exception for sealed water bottles.
  • Keep them on floor, not on workbenches.

• Keep lab clean
  • Clean benches after sessions.
  • Cables on hangers / Probes in Bins
  • Kits and components put away
  • Email if you need clearing supplies.

• End of Semester Cleanup
  • As part of your final checkout you will be responsible for cleaning your work area.
  • Take 10 Minutes: Every time you’re in the lab take some time to organize and clean. It adds up.
Keep it safe

• To be safe you must **recognize** the dangers present in your project.

• This requires **learning** about the equipment and materials being used.

• Crisis situations are not the time for careful thought. Look at your project and test setup to identify potential hazards and **plan** for safety scenarios.

• **Implement** – Thinking about it is not enough! Make improvements to your setup and communicate risks to course staff and students around you!
Power Hazards

• **Electrocution**
  - Don’t make changes to a circuit when power is applied. Always treat cases as electrically live & do not leave circuits exposed.
  - Avoid presenting body as ground path. One Hand Rule.
  - Do not defeat ground connections with adaptors.
  - Capacitors can hold charge a long time after power is removed and deliver that charge very rapidly.
  - Current cannot change in inductors instantly. Don’t forget motors are inductors!

• **Burns**
  - Use wiring of appropriate length and gauge. Does it smell hot?
  - As little as 1W can cause burs for small parts

• **Fires**
  - Do not use a battery when a bench power supply will do.
  - Cover battery terminals to avoid shorts. High short circuit currents!
  - Store batteries in yellow lockers. No unattended charging.
Equipment Damage

• Check Ratings
  • Does the function and ratings of the instrument match the signals you are attempting to measure?
  • If in doubt ask!

• Understand how probes and sources are grounded

• Some instruments are fused but some damage is permanent.

• Report malfunctioning equipment
  • E-mail ece-eshop-repairs
  • ‘Red Tag’ equipment
If a Problem Occurs

• Tend to your immediate safety first! Leave area if necessary and get help!
• Shut off power
• Locate problem before power is restored
• If circuit breaker is tripped, report to ece-eshop-repairs to reset
• If help is needed contact me or electronics shop for assistance
• In event of an accident or emergency call 911
First Aid Stations

- First Aid Kits considered single use. Report all use to me for restock.
- Report all injuries to ece-safety & course staff immediately.
- Land-Line phone works in event of cell phone or power interruption.
- In event of an accident or emergency call 911
Fire Safety

- Shut off soldering irons!
- Plan ahead: Identify closest alarm pulls and exits.
- Identify location of fire extinguishers in your lab. (If equipped)
- Personal safety comes first. Pull alarm, and evacuate building.
- Assemble in grassy area East of ECEB
BEAP

• **Building Emergency Action Plan**
  • Each floor has floor coordinator.
  • Areas of rescue assistance with marked call boxes.
    • SW Stairwells on floors 2-3.
    • E & W Stairwells on Basement and floors 2-5.

• Get Out / Run
  • Fire, Earthquake, Finals Week, Etc
  • Evacuation assembly areas are grassy area E of ECEB outside main lobby or inside Beckman Institute Atrium in bad weather.

• Stay In / Hide
  • Storms
    • Refuge areas in basement and interior hallways and bathrooms.
  • Security Threat
    • Secure your classroom or lab.
    • Run / Hide / Fight
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