EE 330L Energy Systems Lab Safety Policy

All laboratory operations contain some elements of danger. Safe working habits are essential in experimental work. Good housekeeping, using the right tools for the right jobs, avoiding hazards, keeping the lab area clean - all contribute to safe operation. Electricity can be dangerous if handled improperly, and safe habits ensure both personal protection and the protection of equipment. Accidents should be reported as soon as possible to a faculty member.

General Safety Rules:

1) **No food or drinks** are allowed in the laboratory. No visitors/tourists w/out advance permission.
2) Always **wear appropriate clothing** (closed-toe shoes, no loose sleeves or jewelry near equipment).
3) **Know the location** of exit(s), shut-off switch(es), and fire extinguisher(s).
4) In case of emergency, call Campus Security **x6100** (394-6100) or dial **9-911**.

Electrical Safety:

1) Voltages above 50 V_{rms} AC and 50 V DC can be dangerous. Extra precautions should be taken as voltage levels are increased.
2) No power lab should be performed without a Teaching Assistant (TA) or instructor present.
3) Never energize a circuit, i.e., turn on power, until it has been checked by all group members **and** instructor/TA.
4) Use only the provided LabVolt cords and connectors—do not force connections.
5) Double-check all connections before applying power to avoid short circuits or equipment damage. E.g., NEVER connect an ammeter in parallel with a voltage source (or anything else).
6) Never make any changes to circuits or mechanical layout without first isolating the circuit by switching off and/or removing connections to supplies. NO 'hot wiring'!
7) Do NOT leave equipment running unattended.
8) Never open (i.e., remove cover) any equipment in the laboratories.
9) Keep hands dry when handling electrical components.
10) Immediately report any damaged equipment or exposed wires to the instructor/TA.

Conduct During Labs:

1) Remain alert and focused on the task—no horseplay or distractions.
2) Only operate equipment you have been instructed to use.
3) Work collaboratively and communicate with your group members to prevent accidents.
4) If you are the last person leaving the lab, be sure to close and lock all windows and doors.

Electrical Emergency Response:

1) Electric Shock: When someone suffers serious electrical shock, they may be knocked unconscious or be unable to move. If the victim is in contact with the electrical source, immediately turn it off, i.e., turn switch(es) OFF, unplug power cord, or throw breaker(s). Do not touch a victim still in contact with an electrical source; you could electrocute yourself.
2) Electrical Fire:

   If an electrical fire occurs, turn off the electrical source if possible, e.g., turn switch(es) OFF, unplug power cord, or throw breaker(s). If the fire is small and you are not in immediate danger, use fire extinguisher. **IMPORTANT:** Do not use water on an electrical fire.