

Electronics Teaching Lab : BERG 334

Health & Safety Presentation for
EECS 2200: Electrical Circuits
By
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WELCOME BACK!
OSAP funds are usually disbursed in the first half of January. If you applied to OSAP before June 30, 2016, you won't be charged interest on overdue accounts this month.
Save time and access self-service tools.
> go.yorku.ca/my-services

Agenda: Safety in Berg-334 Lab

- Personal Safety
- Equipment Safety
- House keeping



General Safety Rules

Safety is a major concern in Engineering and Industrial professions.

- As engineers you will be required to protect and promote the health, safety and well-being of the community and the environment.



Working in a safe manner is more important than completing your lab.

- First and foremost, you are responsible for your own safety.
- Familiarize yourself with the lab equipment and your surroundings.

Do not do anything, which puts anyone's safety at risk.

- No horseplay inside the lab.
- For any confusion, then please ask a TA or the lab-tech.



Personal Safety



The workbenches have 110VAC powered equipment and power-bars.

- Do not use un-grounded equipment. DC adapters are excepted.
- Don't cycle equipment power directly from the plugs. Use their switches.

Hazard Advisory

Department: Electrical Engineering & Computer Science Building & Room No. BRG 334

Hazards in room include (cross out if not applicable):

Protective measures Required

Version: 2.0 Posted By: Kitty Ki (reviewed Jan 2023)

IN CASE OF LIFE-THREATENING EMERGENCY,

Step 1: Dial 9-911 to request Paramedics, Fire or Police & provide necessary details

Step2: Contact York Security at ext. 33333 or 416-736-5333

*For non-life-threatening emergency, contact York Security at ext. 58000 or 416-736-5470

EMERGENCY LABORATORY CONTACTS

Lab Contact
Ulya Yigit
(416) 736-2100; ext. 77881

Safety Contact
Kitty Ki
(437) 929-2074

Facility Contact
Joe Pedias
(647) 881-6879

No food or drinks inside the labs.

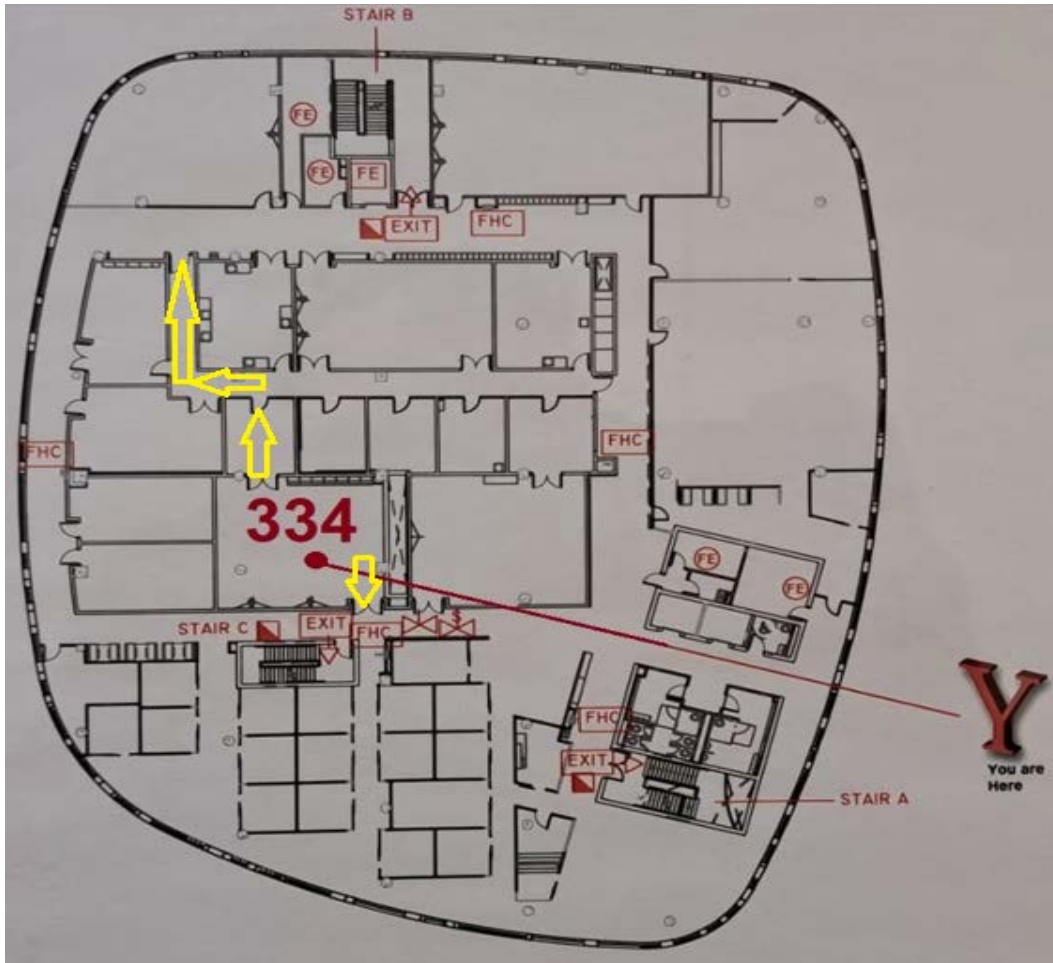
- Spillage can damage equipment
- Keep water bottles and food wraps away from the working area.

Hazard Advisory

- Flammable Materials
- Microwave equipments
- Laser equipments



Personal Safety



Know the emergency exit.



- Opposite of this room exit
- End of the East/West corridor

Personal Safety

EMERGENCY ASSEMBLY POINT (EAP)

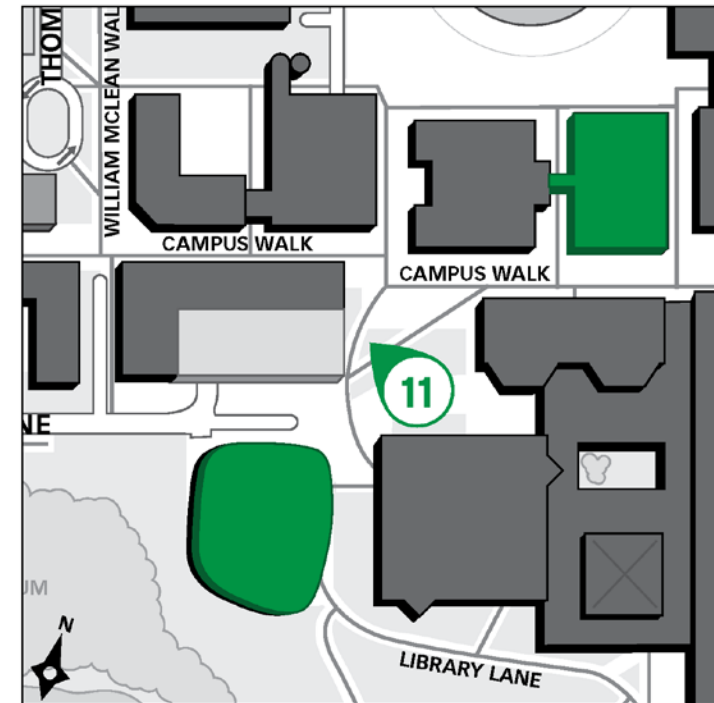
- EAP is designated areas on campus, which are to be used in the case of emergency situations.
- Safe area for individuals to stand, while waiting for emergency personnel to respond.
- **For Bergeron Building EAP# 11**
'Campus Walk (central area)'

EMERGENCY ASSEMBLY POINT



- ➔ Lassonde Building
- ➔ Bergeron Centre for Engineering Excellence

▲ BACK TO LIST



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Personal Safety

EMERGENCY ASSEMBLY POINT (EAP)

- In case of ringing alarm, leave the lab urgently and proceed to Emergency Assembly Point (EAP)



- For Bergeron Building EAP# 11 'Campus Walk (central area)'
- Wait for further instructions



Safety in the Lab



- Use the hand sanitizing station at the entrance
- You can get face mask from the supply room if you need.



House Keeping

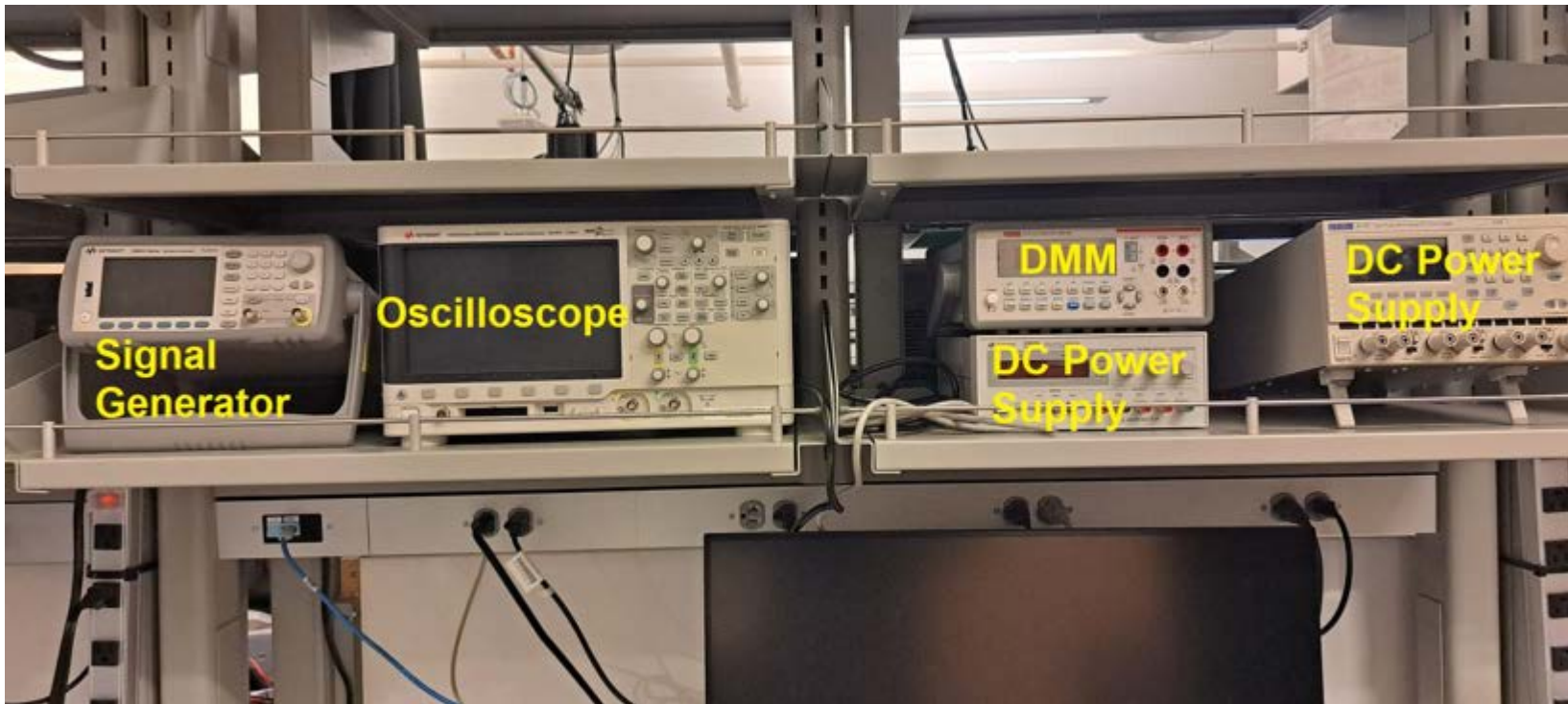


First aid kit box in
310E/supply room
corridor

Equipment Safety

Get yourself familiarized with the lab equipment.

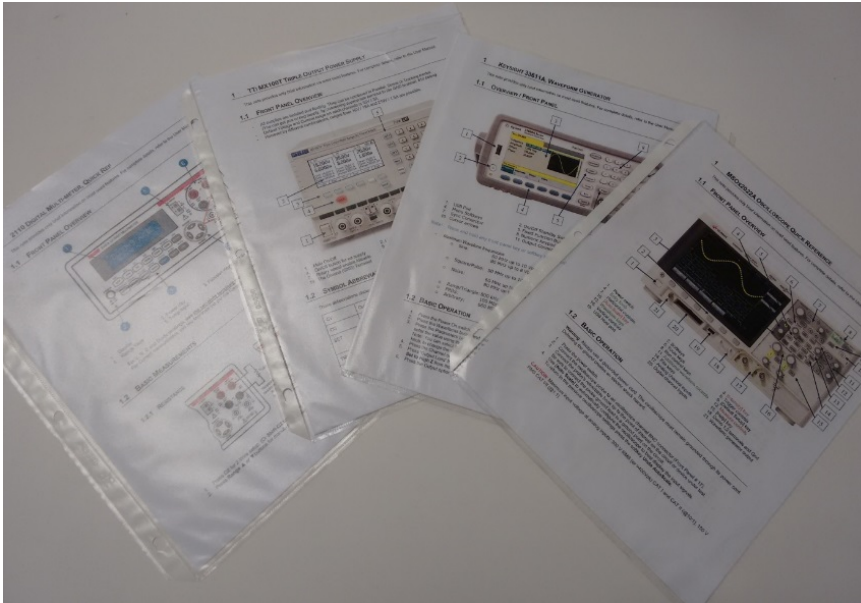
- Each station has 1 Signal Generator, 1 Oscilloscope, 2 DC Power Supply and 1 Digital Multimeter
- Do not short the power supply outputs!
- Do not unplug any lab equipments or computer monitors!



Equipment Safety

Quick Reference Manual

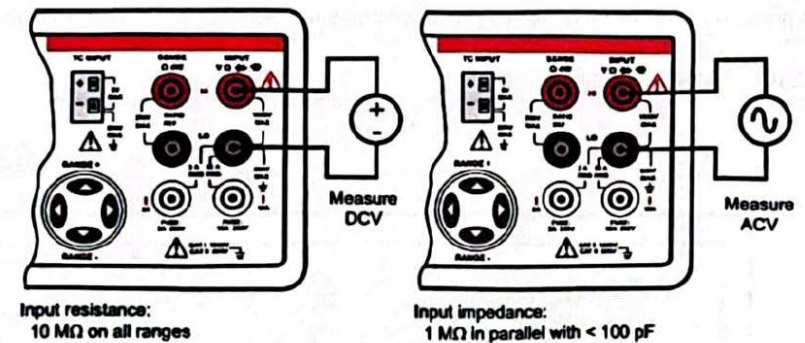
- On each workbench, there are laminated Quick-reference sheets.
- For detail Specifications, Ranges and Limits etc. read the User-manuals of the equipment.



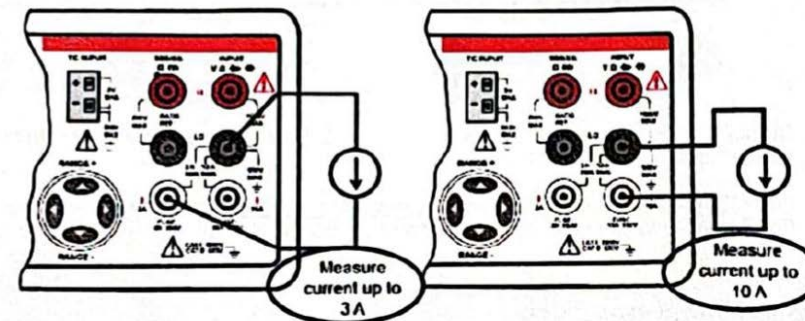
Don't forget to change the DMM configuration

- Use the **upper** configuration to measure **voltage**
- Use **bottom** configuration to measure **current**

1.2.2 VOLTAGE MEASUREMENT



1.2.3 CURRENT MEASUREMENT



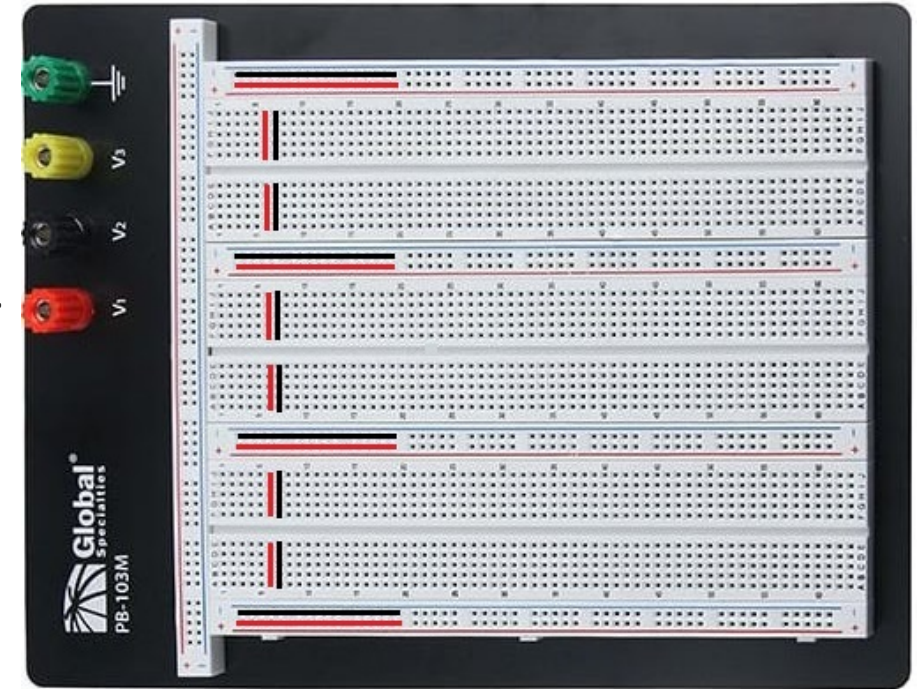
Equipment Safety

Keep your work area neat.

- Connect the Oscilloscope probes with ground correctly
- Do not make or break connections, while the circuit is powered up.
- On the bread board, avoid putting components in a small cluster.
- Power the components on breadboard using the power rails

Set up the lab equipment properly.

- Func Generator: Apply DC offset, only if you need.
- Oscilloscopes: Check the *coupling* of your probes. Normally you would use DC coupling.
- Oscilloscope Probes: Check where you are putting the GND of the probe.
- Power supply: Set and check for any current limiting, on the supply. Don't short the supplies!
- DMM: Put leads in correct place, for current measurements.



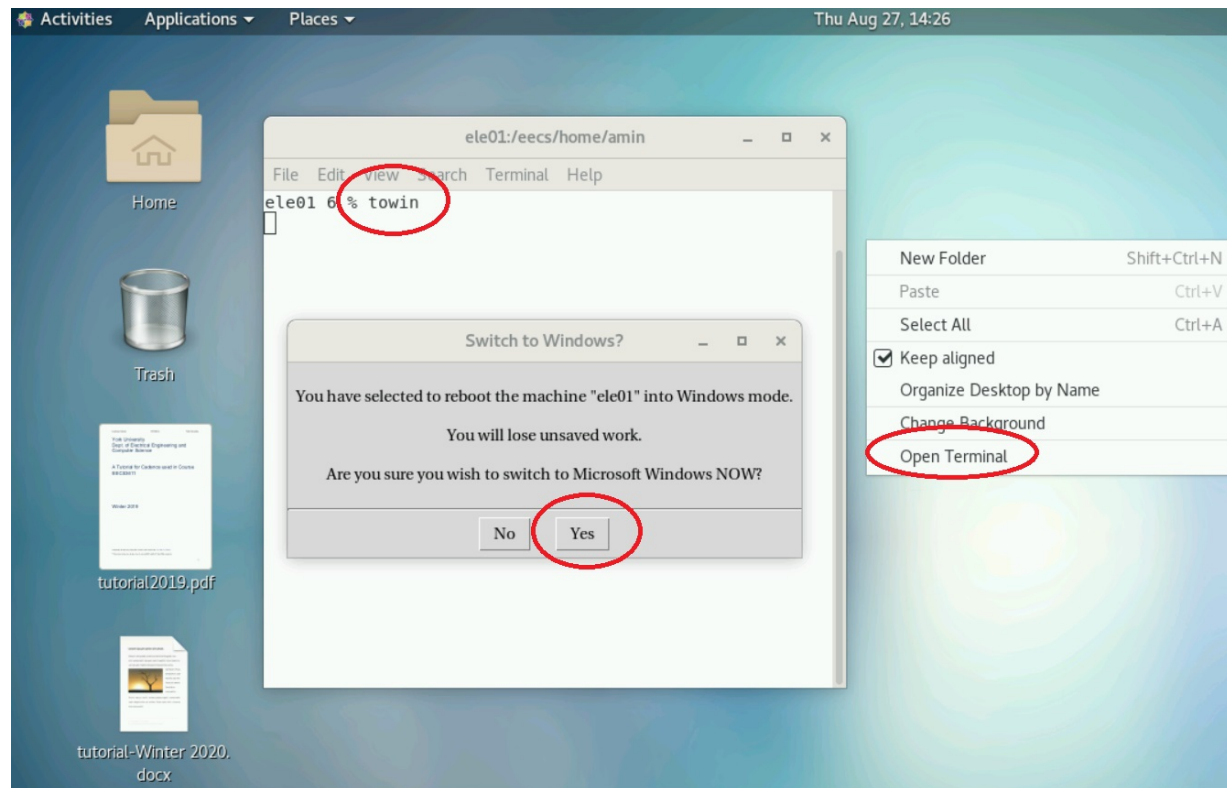
Other Lab Support

Use LAS1002 (gsp) or LAS1004 (ptl) lab computers to use design softwares (OrCAD Pspice or LTSpice) outside the regular lab hours

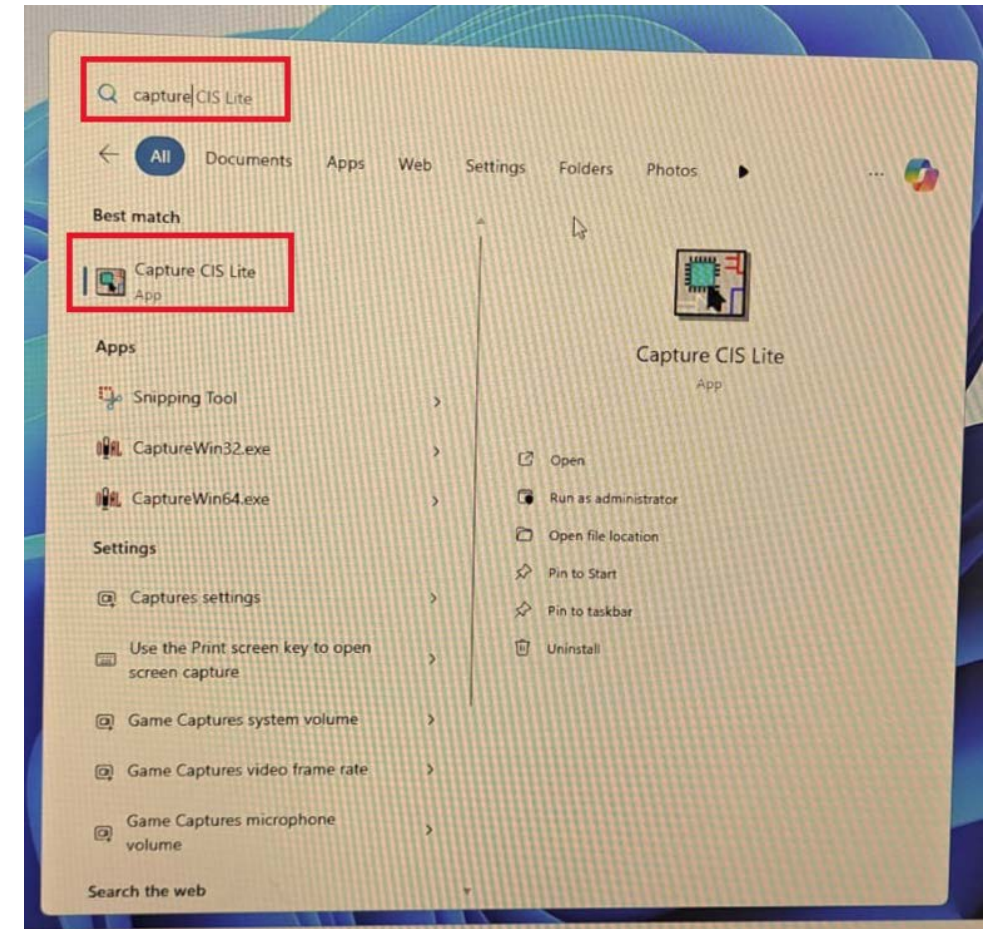


For Dual Mode computers Switch from Linux to Windows

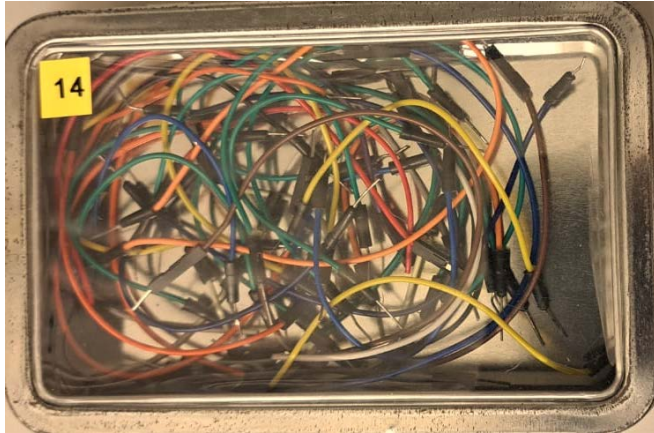
- Open a terminal
- Type 'towin' on the terminal and hit enter and press 'Yes'



Type 'Capture' on the search bar to find 'Capture CIS Lite' PSPICE software



Safe Bench Working



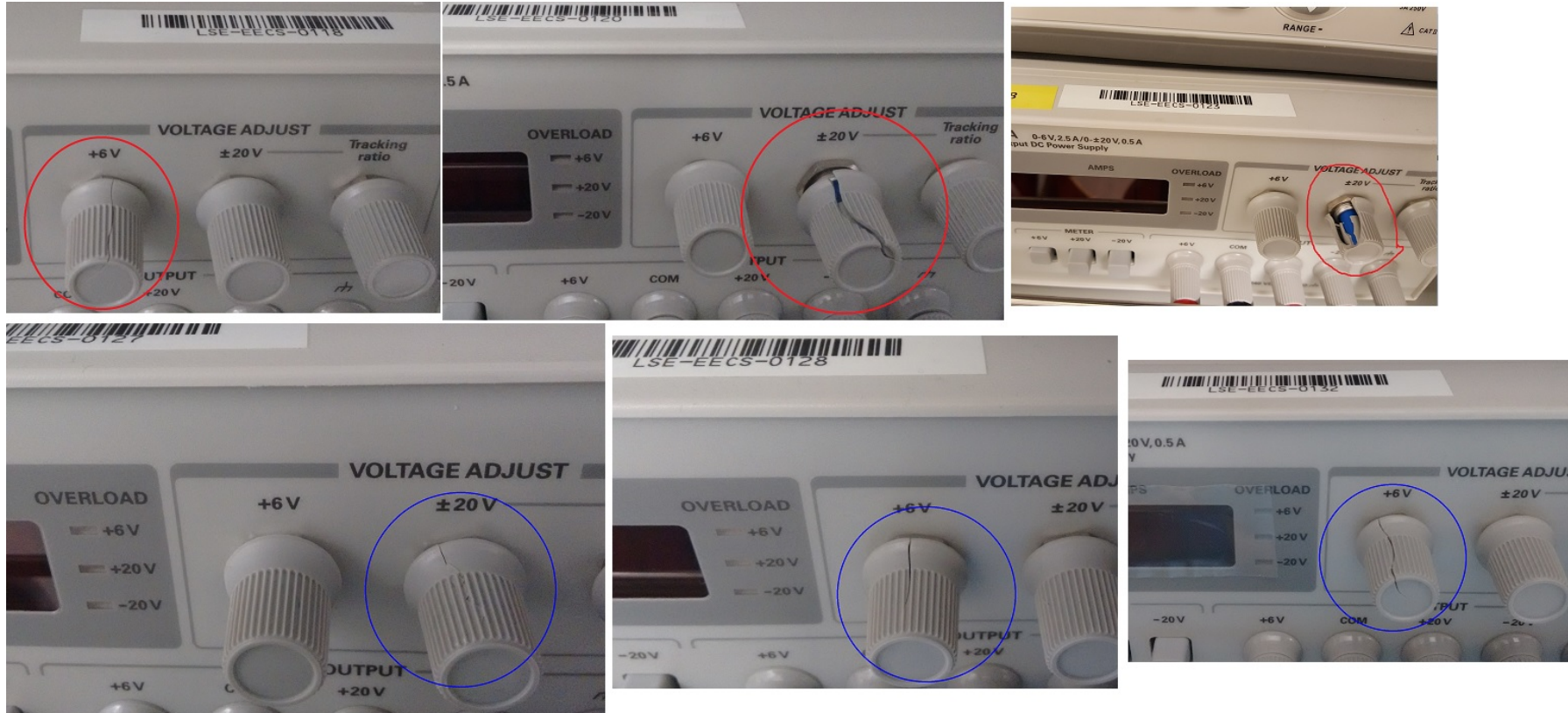
Make correct use of hand tools.

- Use the plier to insert the leads in the bread-board.
- If you need more jumper cables, use wire stripper to stripe the wire, do not use your finger.
- If you cut leads, cut them away from your eyes.
- Use the right size in the cutter to cut the wires.



Safe Bench Working

- Use the power supply knob gently so that doesn't damage.



House Keeping

Each group is responsible for their work-area!

- Do not damage or misuse the test equipment.
- Clear your work-bench of any leftover debris, cut wires etc. before you leave.
- Be on time in the lab!



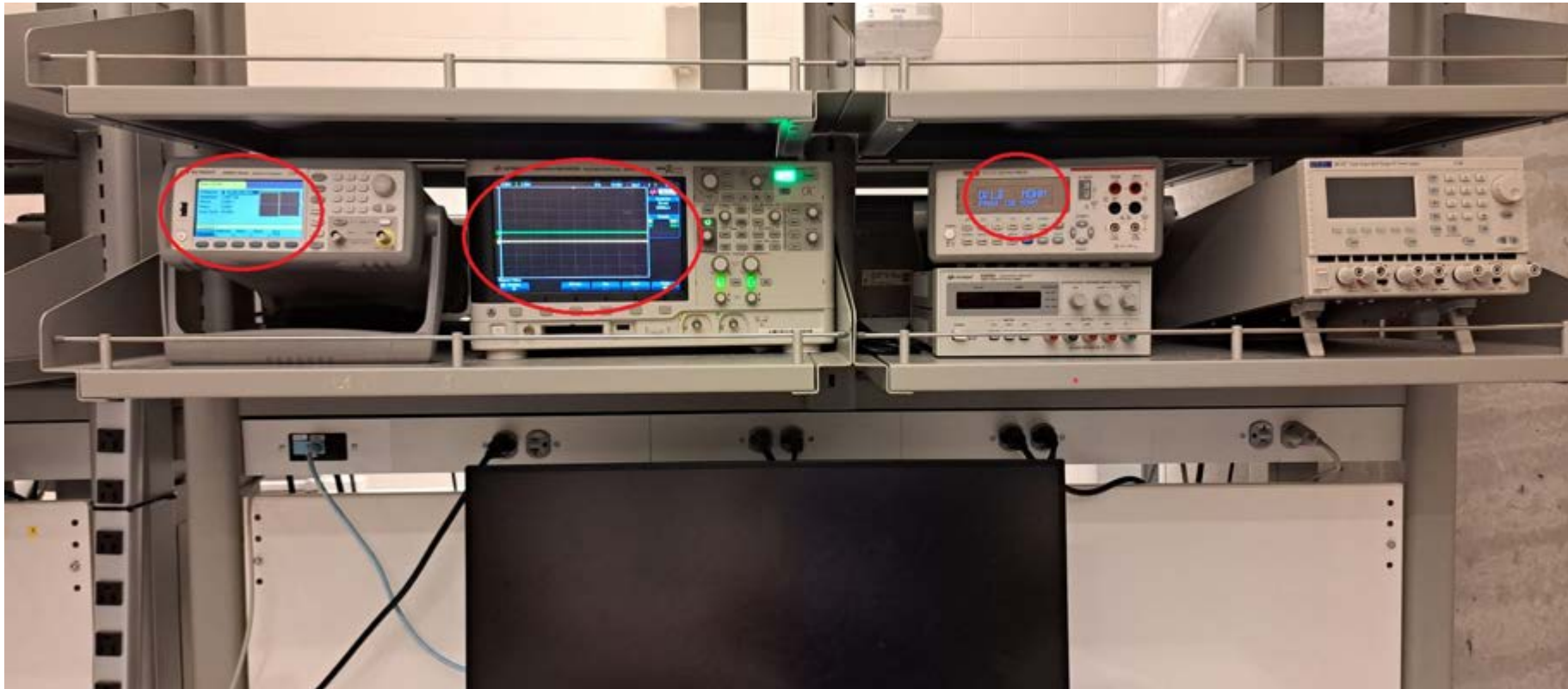
House Keeping

- Leave your YU card to borrow component box
- Write your name, ID# and box# on the paper ID (if you do not have physical YU Card)



House Keeping

Don't forget to power off all the lab equipments at the end of your lab Session



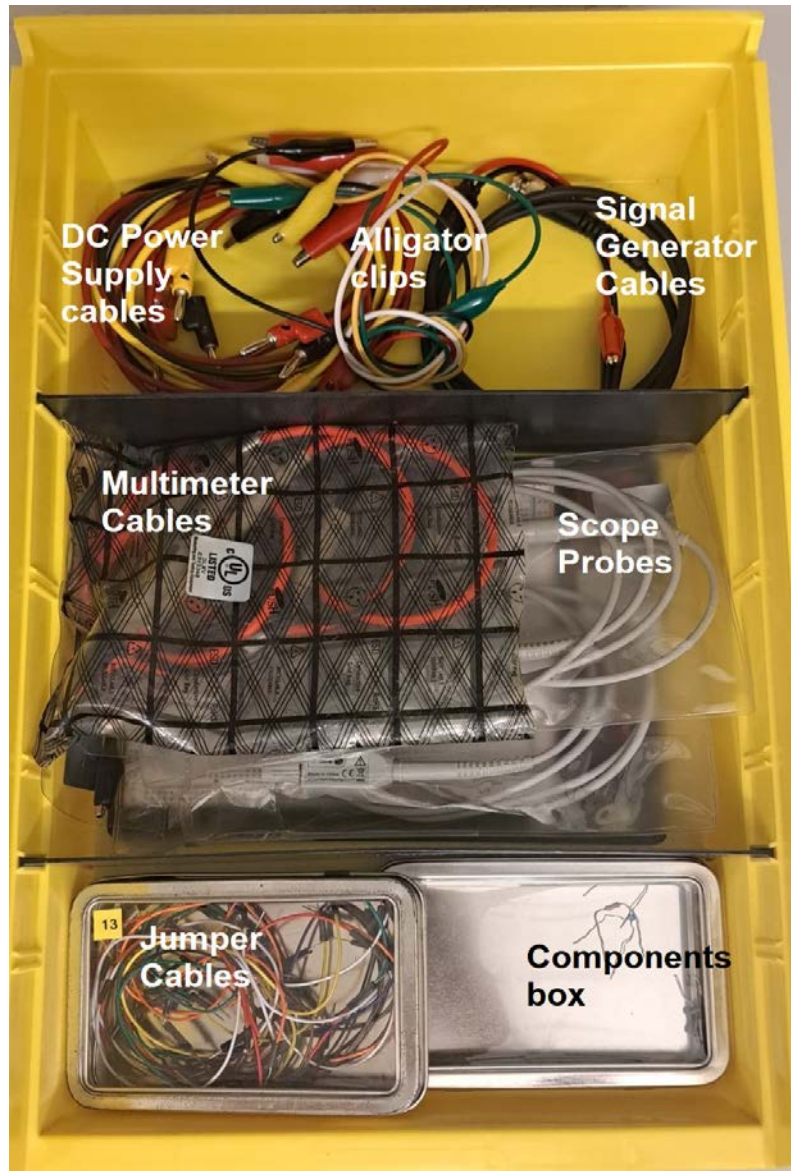
House Keeping

Pick up any missing or extra circuit components from the desk in supply room



House Keeping

Return the equipment organized in the same packing you got



Complementary services and Important Links

goSAFE services @ YorkU

- goSAFE will walk you anywhere on-campus
- Golf carts to help get you around campus as quickly and safely as possible
- Transportation Services: Shuttle Bus

<http://gosafe.info.yorku.ca/>

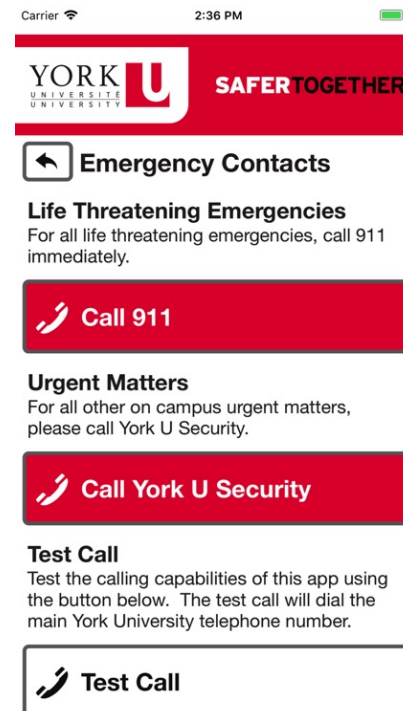


York U Safety: app for students, faculty and staff.

Life Threatening **Emergency:** Call 911

York U **Emergency:** 4167365333 ext. 33333

York U **Non-Emergency:** 4166508000 ext. 58000



THANK YOU

