

# University of Waterloo Electrical & Computer Engineering Department

# ECE 331 ELECTRONIC DEVICES

# **GENERAL LAB INFORMATION**

**Winter 2018** 

## 1. Teaching Team

- Laboratory Instructor:
  - o Marco Iskander (marco.iskander@uwaterloo.ca). Appointments via email.
- Teaching Assistant:

Name	Email	Marking
Ahmed Alqurashi	aalquras@uwaterloo.ca	Lab 1, 2, 3, 4 and 5

## 2. Key dates

		1	1		1	1	
Week		M	T	W	Th	F	LAB Dates
1	January	1	2	3	4	5	Lecture starts Jan 2
2		8	9	10	11	12	
3		15	16	17	18	19	Lab 1
4		22	23	24	25	26	Lab 1 due @ 10 pm
_	<u>-</u>	29	30	31			Lab 2
3	5 6 7 February				1	2	Lab 2
6		5	6	7	8	9	Lab 2 due @ 10 pm
7		12	13	14	15	16	
X		19	20	21	22	23	Reading Week
0	0	26	27	28			Lab 3
8					1	2	
9	March 1	5	6	7	8	9	Lab 3 due @ 10 pm
10		12	13	14	15	16	Lab 4
11		19	20	21	22	23	Lab 4 due @ 10 pm
12		26	27	28 29	29	30	Lab 5
		26	21	28	29		Lab 5 due @ 10 pm same day of the lab
	April	3	4	5	6	7	Lecture ends Apr 4

Holidays: Feb 19 (Family Day +Reading Week)

- Afternoon labs (202, 203 and 201): 1:30 pm 4:20 pm in E2-3347
- Lab reports are due on Fridays as indicated in the table above (except for Lab 5).

#### 3. Laboratory Manuals

- The ECE 331 Laboratory Manual is available for you to download from Learn.
- Be sure to read the whole lab description to be able to smoothly complete the lab.

#### 4. Laboratory Groups

- Students are to work in groups of <u>two</u>. Groups of one may be permitted at the discretion of the lab instructor.
- You have to select your group partner from the **same lab section**.
- To join a group, in LEARN, go to "**groups**", you will see a note "Enrol in a group for LABs", select "**Choose Group**" and then select the group that you want to join. You and your partner should select the same group number.

#### 5. Laboratory Attendance

- Lab sessions will start during the **third week** of the term.
- Plan to be in the laboratory 5 minutes before start each lab to be seated ready for the lab instructor's introductions.
- You have to physically attend the lab to be able to get mark for that lab. Labs not
  attended will receive a mark of zero no matter what are your contributions
  in the prelab or the report. If this situation happens, please contact the lab
  instructor.
- Both partners must assist equally in performing the experiment.
- If you are scheduled to have an interview during the lab time, please contact the lab instructor **at least two business days BEFORE** the lab session to discuss how you will complete the lab.
- In case of missing a lab due to illness, you need to provide an acceptable proof for missing this laboratory.

### 6. Report Submission

- All the submissions will be to the drop box on LEARN.
- Prelab is due 10 minutes before your lab session starts.
- You have to submit your data by the end of your lab session.
- For **Reports due dates** check key dates above.
- Your final report should include your prelab, in-lab measurements, and postlab in PDF format.
- Each group of two students will submit one prelab, data, and report.
- Late submissions will not be accepted (late = 0).
- Collaboration in any part of the lab is not allowed between different groups. Partially or fully copying another student's work is considered plagiarism. If this

situation happens, you will get a mark of zero for that particular lab and this incident will be reported and more actions may be taken.

#### 7. Lab Marks

- Any pre labs, data sheets or reports missing will be assigned a mark of 0.
- If you have any concerns regarding your lab grade, contact the lab marker TA.

#### 8. Lab safety

- Each person is responsible for his/her own safety **and the safety of others.**
- There is no horseplay or joking around in the laboratory
- Electricity can be very dangerous, even lethal respect it.
- Instruments and equipment in the lab should be used carefully and correctly.
- Power supplies and function generators are typical sources of power and can be hazardous if misused.
- If you smell burning or see smoke coming from your circuit **disconnect the power immediately.** Then report the occurrence to a TA or the lab instructor.
- Circuits often dissipate power in the form of heat. Take care as components can become hot enough to burn.
- Exercise care when connecting polarized components, such as electrolytic and tantalum capacitors, they are designed to operate with a certain voltage polarity. If incorrectly connected they can fail or explode.
- Eating and drinking are not allowed in this lab in order to prevent injury to you and damage to equipment.
- No open toed shoes or bare feet in the lab.
- No running in the lab.
- No bags in the aisle or walk ways
- No loud talking or yelling in the lab.
- Do not unplug lab equipment or its Internet connection.
- Never have your face over the circuit when you turn the power on!
- Please familiarize yourself with the fire extinguisher location and the fire alarm which is located by the west stairwell.
- If the fire alarm sounds, power down your circuits as you will be instructed to leave the lab and assemble outside the building, bring your coat.
- Review First Aid, Fire and Lockdown posters beside phone inside lab main door.
- Ambulance dial 911, UW Police extension 22222 (or 519-888-4911).
- Keep walking areas clear of knapsacks and other obstructions.
- Always turn off the equipment when you are done.