

## EE 2005 Electronic Devices and Circuits

### Course Team

#### Course Leader

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#### Lab/Tutorial Instructor

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#### Teaching Assistants

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### Course Meeting Times and Location (SEP: Online only; OCT/NOV: Online/On Campus)

Lectures: Tuesday 10:00 – 11:50 ZOOM / LI (AC2) 2505  
 Tutorials: T01 Friday 14:00 – 14:50 ZOOM / YEUNG (AC1) LT-12  
 T02 Tuesday 09:00 – 09:50 ZOOM / YEUNG (AC1) P4703

#### Laboratories:

Lab Sessions	Week	Day	Time	Venue (or Online)
L01	3, 4, 6, 8, 10	Monday	09:00 - 11:50	YEUNG P1809
L02		Wednesday		YEUNG P1809
L03		Thursday		YEUNG P1812
L04		Friday		YEUNG P1812

### Course Calendar

Week	Lecture	
	Date	Coverage
01	1/09	Review of DC circuit analysis methods
02	8/09	Equivalent circuit transformation and dependent sources
03 (Lab 1)	15/09	Capacitors and Inductors; Transient solutions
04 (Lab 2)	22/09	Impedance; Phasors
05	29/09	<b>TEST 1</b>
06 (Lab 3)	6/10	AC circuit analysis
07	13/10	Frequency response
08 (Lab 4)	20/10	Basics of operational amplifiers (Op Amp)
09	27/10	Op Amp circuit design and applications; Active filters
10 (Lab 5)	3/11	Diode circuits
11	10/11	<b>TEST 2</b>
12	17/11	Transistor devices; Basic transistor amplifiers
13	24/11	More about two-port representations ( <b>Lab Report Deadline</b> )

## Assessment

The final grading will be assigned according to the following weightings:

<b>Final Exam</b>	<b>50%</b>
<b>Coursework</b>	<b>50%</b>
Test 1	15%
Test 2	15%
Lecture Assignments	5%
Tutorial Assignments	5%
Lab Report	2.5%
Lab Work	7.5%

### a) Tests

	<b>Week</b>	<b>Date</b>	<b>Scope</b>
Test 1	5	SEP 29	Week 1 – <b>Week 3</b>
Test 2	11	NOV 10	<b>Week 4</b> – Week 9

If absence from a test is due to illness, a medical certificate to cover the day of the test must be provided. You must notify the course leader no later than 1 h after the start of the test and follow up by submitting the medical certificate within 24 h. In any other cases of absence, **prior approval** must be sought from the lecturer in charge of the test. **Retrospective appeals will not be considered.**

### b) Class participation

**Ten lecture assignments** will be conducted during the lectures and **ten tutorial assignments** will be given in the tutorials. No marks will be given for any assignments missed.

### c) Lab report

Deadline: **Nov 24**

Scope: **Lab 5**

A 50% per day penalty will be imposed for late submission.

## Passing requirements

### a) Minimum mark

The minimum mark requirement applies to both the examination and the course work. To pass the course, you must score at least 30/100 on BOTH the examination and course work.

### b) Minimum attendance (applies to Labs)

You must attend at least 75% of the scheduled lab sessions. Hence to meet the minimum requirement, you must attend at least 4/5 sessions. In other words, **you can only afford to miss 1 session**. The advanced lab at the end of the course **cannot** be used to fulfill the attendance requirement.

If you are more than **30 minutes** late for the lab, you will be marked as absent. You will be allowed to work on the lab nonetheless but with a 50% penalty (provided you have completed the relevant Pre-lab assignment).

If you are ill on the day of the lab and have to miss the lab, **email the lab supervisor** as soon as possible. Your absence must be covered by a medical certificate in order for you to be excused and allowed to schedule a make-up session. If you foresee circumstances that will prevent you from participating in a lab, please consult your lab supervisor **in advance** to be excused and to

arrange a make-up. **The make-up lab should be completed no later than 1 week after the missed session.**

All lab sessions will **end on time**, with no time extensions. Make-up sessions can be arranged for another day to work on incomplete parts with a **50% penalty** applied.

### **Academic Honesty Policy**

Students are expected to write their own lab report. It is understood that students consult one another for clarification of concepts, advice, to compare lab results, etc. You may also use whatever materials you find on the web, in other texts, or other sources to assist in preparing your lab report. All sources must be referenced in the report. Copying any portion of another student's lab report is prohibited. Violations of this policy will result in an automatic FAIL in this course and filing of an academic misconduct report to the Academic Regulations and Records Office. All students are expected to be familiar with and adhere to the University standards of Academic Honesty.

([http://www.cityu.edu.hk/provost/academic\\_honesty/rules\\_on\\_academic\\_honesty.htm](http://www.cityu.edu.hk/provost/academic_honesty/rules_on_academic_honesty.htm))

### **Required Text**

Fundamentals of Electric Circuits by Charles K. Alexander and Matthew N. O. Sadiku, 6th Edition, McGraw Hill, 2016

### **Optional Text**

- Engineering Circuit Analysis by W. Hayt, J. Kemmerly, J. Philips and S. Durbin 9th Edition, McGraw-Hill, 2018
- Linear Circuit Analysis by C. K. Tse Addison-Wesley and Pearson, 1998