
Microelectronics Lab

EE2245

Fall, 2018

Prof. Meng-Fan Chang (張孟凡)
Department of Electrical Engineering
National Tsing Hua University (NTHU)
Hsinchu, Taiwan

General Information

□ Instructor:

Prof. Meng-Fan Chang (張孟凡)

- Office: Room 861, Delta Building (台達館861室)
- Office Hours: 15:00~15:30 (Tue.)
- Email: mfchang@ee.nthu.edu.tw

□ TA: 邱硯晟 高暉曜 李俊穎 魏士穎

- Email: 邱硯晟 ppkkp00032@yahoo.com.tw
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- 李俊穎 ck1001202@gmail.com
- 魏士穎 tom8526741@gmail.com

□ Place & Time:

- 台達館**216** (for lecture), 台達館**218 and 220** (for lab); T7T8T9

Course Contents

□ Objective:

- This course is intended for EE students at the junior level who have at least taken the class in basic circuit theory. Students will get hands-on experiences through experiments to complement the learning of theories. Operation amplifiers, passive devices (R, L, and C), and transistors will be used extensively to implement various circuits as listed below.

□ Text Book:

- Class handout

Course schedule

Date	Lab	Lecture	Comment
Sept.11		Lab Instruments, DC and AC Circuit	
Sept.18	Lab1	No Lecture (Lab is still on going)	(teacher's conference trip)
Sept.25	Lab1	No Lecture (Lab is still on going)	
Oct.2	Lab2	Time-Domain Responses of 1st- and 2nd-Order Circuits	
Oct.9	Lab2	No Lecture (Lab is still on going)	
Oct.16	Lab3	No Lecture (Lab is still on going)	(teacher's conference trip)
Oct.23	Lab3	No Lecture (Lab is still on going)	
Oct.30	Lab4	Active Filters	
Nov.6	Lab4	No Lecture (Lab is still on going)	(teacher's conference trip)
Nov.13	Lab4	No Lecture (Lab is still on going)	
Nov.20	Lab4	No Lecture (Lab is still on going)	
Nov.27	Lab5	Electronic Oscillator	
Dec.4	Lab5	No Lecture (Lab is still on going)	(teacher's conference trip)
Dec.11	Lab6	Parameter Extraction in SPICE MOSFET Model	
Dec.18	Lab6	No Lecture (Lab is still on going)	
Dec.25	Lab7	Single-Stage MOSFET Amplifiers	
Jan.1st	Lab7	No Lecture (Find another day in this week for Lab7)	Holiday (Jan.1st)
Jan.11		Final exam	

Grading of EE2245

- ❑ **Lab demo: Demo to TA before deadline !**
 - **Late policy: 0%**
- ❑ **7 Lab reports: 35 %**
 - **Late policy: 0%**
- ❑ **Final exam: 65 % (Jan.11)**
- ❑ **No lecture & lab: 1/1 (元旦)**

Grading of EE2245

❑ Extra project(Option): SRAM CIM

- Extra score on total : **2**
- Deadline: **Jan. 10**

❑ 遲到（以十五分鐘為限）、早退扣總分1分，如有病假需以e-mail 或電話通知老師。視出席狀況，該實驗最多可不予計分。實驗報告需在實驗完成後之下一週上課一小時內繳交，逾時即算缺交。

❑ 同學間可相互討論實驗報告的問題，然後各自完成報告。抄襲報告則不予以計分。

❑ **補demo請寄信與助教預約時間**

Thanks