

## Course Information

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Course focus and format:

In this semester, we will discuss the fundamentals of electronic circuits for both analog and digital applications. Most of the lectures will follow the chapters (13~17) of the textbook. However, if needed, we will also spend some time on supplement materials which are closely related to this course. The slides used for the class are posted on website <http://cc.ee.ntu.edu.tw/~lhlu/eecourses.html>.

Course grading:

Quiz (10%)

Mid-term exam + quiz (40%)

Quiz (10 %)

Final exam + quiz (40%)

Textbook: Microelectronics Circuits 7<sup>th</sup> edition by Sedra/Smith

**Lectures: Monday 09:10-10:00, Tuesday 16:30-18:20 (15:30-16:20 reserved)**

Course Coverage:

Chapter 13	13.4-13.8, 13-11
Chapter 14	14.1-14.8
Chapter 15	15.1-15.6
Chapter 16	16.1-16.5
Chapter 17	17.1-17.5

## Homework Assignment (2017)

### Chap 13 Filters:

- 13.4 Prb 13.35
- 13.5 Prb 13.41
- 13.6 Prb 13.46, Prb 13.47
- 13.7 Prb 13.53
- 13.8 Prb 13.61, Prb 13.63, Prb 13.64
- 13.11 Prb 13.84

### Chap 14 Signal generation and waveform shaping circuits:

- 14.1 Prb 14.6
- 14.2 Prb 14.14, Prb 14.17
- 14.3 Prb 14.23
- 14.4 Prb 14.31
- 14.5 Prb 14.38
- 14.6 Prb 14.41
- 14.7 Ex 14.24, Prb 14.45
- 14.8 Prb 14.49

### Chap 15 CMOS digital logic circuits

- 15.1 Prb 15.2, Prb 15.10
- 15.2 Prb 15.18
- 15.3 Prb 15.27
- 15.4 Prb 15.37
- 15.5 Ex 15.16
- 15.6 Prb 15.64

### Chap 16 Advanced digital IC design

- 16.1 Ex 16.4
- 16.2 Prb 16.6
- 16.3 Prb 16.13
- 16.4 Prb 16.28, Prb 16.30
- 16.5 Prb 16.41

### Chap 17 Memory circuits

- 17.1 Prb 17.6
- 17.2 Prb 17.13
- 17.3 Prb 17.22
- 17.4 Prb 17.32
- 17.5 Prb 17.44