

1. Course Description:

This course introduces the fundamental techniques of circuit analysis.

2. Text book:

Foundations of Analog and Digital Electronic Circuits, Anant Agarwal and Jeffrey Lang, published by Elsevier and Morgan Kaufmann Publishers

3. Teaching Method:

Lectures offered in Mandarin

4. Evaluation:

Quiz: 40%

Midterm: 30%

Final: 30%

* Calculators are allowed in all examinations

5. Class Webpage: NTHU e-learning system (<http://lms.nthu.edu.tw>)

6. Syllabus:

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|-------------------------------|-------------------|
| * Fundamental circuit laws | Chapter 1 |
| * Basic analytical techniques | Chapter 2 |
| * Linear circuit analysis | Chapter 3 |
| * Energy storage elements | Chapter 9 |
| * First-order circuits | Chapter 10 and 11 |
| * Second-order circuits | Chapter 12 |
| * Sinusoidal steady state | Chapter 13 and 14 |
| * Operational amplifiers | Chapter 15 |