

Course Syllabus

Class time: M3M4W2

Location: Delta Room 217

Instructor: Chen-Bin Huang (robin@ee.nthu.edu.tw) Delta 859 Tel: 62180

Feel free to arrange office hour via e-mail.

Head-TA: Emily Chen (eggs0729@gmail.com) EECS 312 Ext. 34927

Course Description:

This is one of the mandatory courses for the EE Department. This course introduces the basic theory of linear circuit analysis, which is essential for designing complex electronic, communication, computer, and control systems.

Textbook:

Svoboda and Dorf, *Dorf's Introduction to Electric Circuits*, Global Edition, Wiley.

Class notes: Course materials available on <https://elearn.nthu.edu.tw/>

Teaching Method:

Lectures in Chinese. W1 reserved for potential quiz and TA hour.

Course Content:

- Circuit variables and elements
- Resistive circuits
- Method of analysis of resistive circuits
- Circuit theorems
- Operational amplifiers
- Energy storage elements
- Complete response of RL and RC circuits
- Circuits with two energy storage elements (RLC circuits)
- Sinusoidal steady-state analysis
- AC steady-state power

National Tsing Hua University
10910 EE 221001 Electric Circuit

Grading:

Homeworks (no late turn-in) (20%)

Quizzes (20%)

Examination 1 (20%)

Examination 2 (20%)

Final examination (20%)

Ethics policy:

As a student of NTHU, you are here to learn.

1. You should always bear honor and confidence in your mind. You should be responsible for your own grade and in a longer term, your future. You can start by finishing your own class assignments.
2. Plagiarism in any form is unacceptable. The plagiarist will receive a (-100)% for that assignment. I do, however, encourage discussions among classmates.
3. Misconducts during examinations will result in failure of this course.
4. Overly active club participation makes no excuse for late homework and/or missing exams.