# **National Tsing Hua University**

11120 EE 221002 Electric Circuit

# **Course Syllabus**

Class time: M3M4W1W2	Location:	Delta 217
Instructor: Chen-Bin Huang (robin⊚ee.nthu.edu.tw) Feel free to arrange office hour via e-mail.	Delta 859	Tel: 62180

Head-TA: Vivian Chen (abc0963520012 gmail.com) EECS 311 Ext. 34926

#### **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 quiz/make-up/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

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## Grading:

Quizzes (total of 6, but I'll delete one worst score) (25%) Examination 1 (25%) Examination 2 (25%) Examination 3 (25%)

## 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. <u>Misconducts</u> during quizzes/examinations will result in direct failure of this course.
- 3. Overly active club participation makes no excuse for late homework and/or missing exams.