

National Tsing Hua University
Department of Power Mechanical Engineering

PME 3202 **電子學 二 (Electronics II)** **Fall 2010**

Instructor: 李昇憲 助理教授 (Assistant Professor: Sheng-Shian Li)

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Credit: 3 學分 **上課教室:** 工一 216 室

上課時間: Wednesday 10:10 - 12:00, Friday 10:10 - 11:00.

Office Hours of Instructor (教師諮詢時間): TBD

先修科目: 電子學 一 (Electronics I)

助教及諮詢時間: TBD

授課大綱:

1. Introductions and reviews of electric circuits
2. Bipolar Junction Transistors (BJTs)
3. Frequency Responses of Amplifiers
4. Single-Stage Integrated-Circuit Amplifiers

Reading

- Chapter 5 (Secs. 5.4 – 5.11)
Sec. 1.6, Sec. 4.8 - 4.9
Chapter 6

Midterm Examination (11 月 15 日, 星期一 7:00 – 10:00 pm)

5. Differential and Multistage Amplifiers Chapter 7
6. *Operational-Amplifier and Data-Converter Circuits Chapter 9

Final Examination (1 月 10 日, 星期一 7:00 – 10:00 pm)

*若時間不夠，部份內容不教。

Textbook:

A. S. Sedra and K. C. Smith, *Microelectronic Circuits*, Oxford University Press, 5th edition, 2004.

References:

1. Neamen, D. A., *Electronic Circuit Analysis and Design*, Irwin, 2nd edition, 2001.
2. Razavi, B., *Fundamentals of Microelectronics*, Wiley, 2007.

Evaluations:

1. Quizzes 15%
2. Term Project and Computer homework (no less than 30%)
3. Midterm Exam: 25%
4. Final Exam: 30% (comprehensive)

Extra Point: 0 -10% (Attendance, extra computer homework, term project...)