

Course logistics



- Course website: <https://wangc86.github.io/csu0007/>
 - Homework submission: via NTNU Moodle (<https://moodle.ntnu.edu.tw/>)
- Course meetings:
 - Tuesdays 9:10-10:00 and Fridays 15:30-17:20, in room C007, Gongguan Campus
- Instructor: 王超
 - E-mail: cw@ntnu.edu.tw
 - Office hours: Wednesdays and Fridays, 8-10am
- Teaching assistant: 梅志碩
 - E-mail: 60847087s@gapps.ntnu.edu.tw

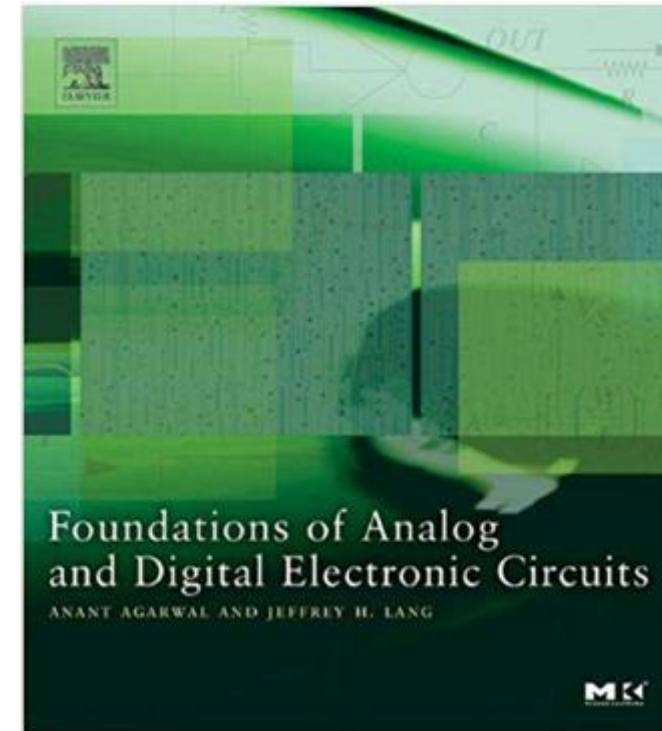
Course objective and organization

- Objective of this course:
 - For freshman students to learn the basics of electronic circuits, as a preparation for advance topics in computer science and engineering discipline
- I will give lectures using “PPTs + blackboard illustration + note”
 - **Be ready to take note during the lecture**
- Besides lectures, we will have
 1. Reading assignments for detailed coverage of the subject.
 2. Homework assignments for subject review and exercise.

Both of these are essential for your learning in this course!

Course textbook

- The required textbook:
 - Agarwal, Anant and Lang, Jeffrey H. Foundations of Analog and Digital Electronic Circuits. Morgan Kaufmann; 1 edition (July 18, 2005). ISBN 978-1558607354
 - You may purchase a copy via <https://www.elsevier.com/books/foundations-of-analog-and-digital-electronic-circuits/agarwal/978-0-08-050681-4>



Grading policy

- Homework 45% (submit via Moodle <https://moodle.ntnu.edu.tw/>)
 - First exam 20% (on Nov 13, in class)
 - Final exam 25% (on Jan 15, in class)
 - Participation 5%
 - Attendance 5%
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- No late homework submission and no make-up exam

Academic integrity



本校校訓由第三任劉真校長所訂，於民國41年2月20日第27次行政會議通過。劉校長希望同學們從內心的修養到生活的實踐，都能切切實實地做到這四個字，以樹立良好的學風，進一步達到改造社會的目的。

誠

不虛偽、不欺妄。

凡事能做到始終如一、擇善固執。

正

不偏私、不枉曲。

凡事能做到光明正大，貞固剛毅。

勤

不怠惰、不因循。

凡事能做到自強不息、鍥而不捨。

樸

不奢靡、不浮華。

凡事能做到質樸無華，闇然尚絅。

- Sincerity
- Integrity
- Diligence
- Simplicity

http://archives.lib.ntnu.edu.tw/c2/c2_1.jsp

CSU0007: Basic Electronics

Lecture 01: The Circuit Abstraction

Instructor: Chao Wang 王超

Department of Computer Science and Information Engineering



NATIONAL TAIWAN NORMAL UNIVERSITY

From science to engineering

- “Engineering is the purposeful use of science.” - Steve Senturia
- Abstraction: a way to hide details unnecessary for applications, provided that certain constraints are met
 - Example: Newton’s laws of motion **$F = ma$**
 - ✓ Applicable only when _____

Layers of abstraction in computer engineering

... and a landscape of courses in Computer Science and Information Engineering

