EECS101001, Fall 2024 (updated 5/16/2024)

- Instructor: Jenny Yi-Chun Liu 劉怡君 (jennyliu.yc@gmail.com)

- Lectures: Tue 1:20pm – 2:10pm, Thu 1:20pm – 3:10pm

- Office hours: by appointment (email me!)

- Course description: This course introduces the basic theories and the implementations of logic circuits and digital systems. We will start with the topics of number systems and Boolean algebra, which are fundamental to all digital systems, followed by the optimization, storage elements such as flip flops, and sequential circuits. With both combinational logic and sequential circuits, we will discuss the design of registers, counters, memory as well as programmable devices.

- Textbooks:
  - Lecture notes
  - Digital Design, M. Morris Mano and Michael D. Ciletti, 6th Edition, Pearson International.

- Teaching method:
  Lecture with slides.

- Topics:
  - Digital systems and information
  - Combinational logic circuits
  - Combinational logic design
  - Arithmetic functions
  - Sequential circuits
  - Registers and counters
  - Memory basics

- Grading:
  - Homework and quizzes: 20%
  - Two midterm exams: 50%
  - Final exam: 30%

- Course Website: eeclass, https://eeclass.nthu.edu.tw/