EE3035 Computer Organization

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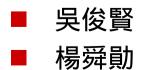
Syllabus

Contents

- Ch1: Introduction
- Ch2: Basic Structure of Computers
- Ch3: Machine Instructions and Programs
- Ch4: Input/Output Organization
- Ch5: The Memory System
- Ch6: Arithmetic Units
- Ch7: Processing Unit
- Ch8: Pipelining

Syllabus

- ☐ Textbook:
  - ■ C. Hamacher, Z. Vranesic, and S. Zaky,"Computer Organization" fifth edition, McGraw-Hill, 2002. (   )

- ☐ Reference Books:
  - ■ B. Parhami, "Computer Architecture: From Microprocessor to Supercomputer", Oxford University Press, 2005. (   )
  - ■ D. A. Patterson and J. L. Hennessy,"Computer Organization and Design-the hardware/software interface", third edition, Morgan Kaufmann, 2005. (   )

- ☐ Prerequisite
  - ■ Digital Logic Design

- ☐ TAs:
  - ■
  - ■

Syllabus

- □ Course Website: http://www.ee.ncu.edu.tw/~jfli/
- □ Grading
  - ■ Homework 30%
  - ■ Midterm 35%
  - ■ Final 35%
  - ■ Attendance: bonus $X = \left\lfloor \Delta \times \dfrac{N_a}{N_t} \right\rfloor, \Delta \leq Z - MAX[\bigcup_{i=1}^{Y}(P_{original})_i], Z = (99, 98, \cdots or, 70)$

    $P_{final} = P_{orginal} + X$
- □ Homework
  - ■ Overdue is not allowed
  - ■ 1-point reduction for one-day delay
  - ■ Copy is not allowed
- □ **Midterm: 10:00-12:00, Mon., Nov. 7, E1-124**
- □ **Final: 10:00-12:00, Mon., Jan. 9, E1-124**

Lecture Schedule

Date	Note
Week 1 (9/12, 9/13)	Ch 0
Week 2 (9/19, 9/20)	Ch 1
Week 3 (9/26, 9/27)	Ch 2
Week 4 (10/3, 10/4))	Ch 2
Week 5 (10/10, 10/11)	10/10: Vacation, 10/11: Ch3
Week 6 (10/17, 10/18)	Ch3
Week 7 (10/24, 10/25)	Ch4
Week 8 (10/31, 11/1)	Ch4
Week 9 (11/7, 11/8)	11/7: Middle Exam, 11/8: no class (ITC, USA)
Week10 (11/14, 11/15)	Ch5
Week 11 (11/21, 11/22)	11/21 & 11/22: no class (Anniversary of NCU)
Week 12 (11/28, 11/29)	Ch5
Week 13 (12/5, 12/6)	Ch6
Week 14 (12/12, 12/13)	Ch6
Week 15 (12/19, 12/20)	Ch7
Week 16 (12/26, 12/27)	Ch7, Ch8
Week 17 (1/2, 1/3)	Ch8
Week 18 (1/9)	1/9: Final Exam