MICROPROCESSOR SYSTEMS

BLG 212E Microprocessor Systems

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- course material
- announcements
- exam grades

Course Objectives

- to understand number systems and data representation in computer.
- to identify and outline the architecture of computers.
- Memory and memory design.
- Architecture of CPU.
- Adressing methods and generic instructions set.
- to describe the principles of interfacing.
- to explain the programming concepts for microprocessors.
- to have a basic knowledge of some popular microprocessors.

Syllabus

1. Introduction, Number Systems
2. Computer Overview - Memory
3. Memory Design
4. Quiz 1, CPU overview, Instruction format
5. Addressing methods
6. Instruction types
7. Instruction types - cntd
8. Midterm Exam 1
9. Parallel communication interface
10. Serial communication interface
11. Quiz 2, Subroutines, Interrupts, Stack, Coding techniques
12. Coding examples and applications
13. Midterm Exam 2
14. Development of Microprocessor Based Designs

Resources

- Microcomputer Engineering, 3rd Edition, Gene H.Miller
- Mikroişlemciler Mikrobilgisayarlar, Eşref Adalı, Birsen Yayınevi, 5th Edition.
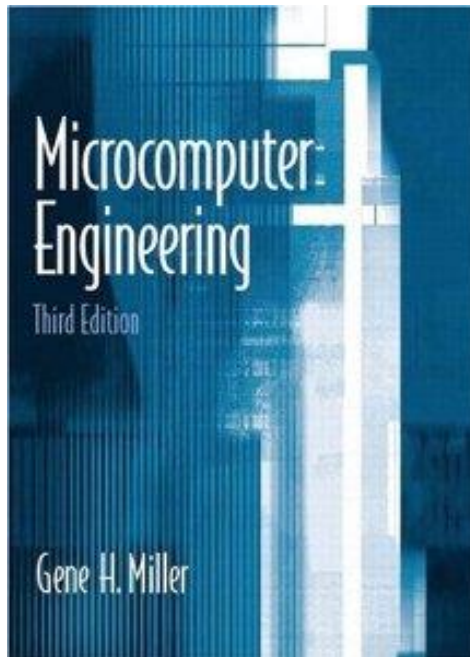
Grading

- Exams:
  - Midterm 1 : 25%
  - Midterm 2 : 25%
  - Homeworks: 10%
  - Final   : 40%
- Requirements:
  - class attendance < 70%: VF
  - weighted average of midterm and HWs< 30%: VF
  - average < 40: FF