BLG 212E - MICROPROCESSOR SYSTEMS
2017 - SPRING (CRN 21999)
SYLLABUS

Course Web Page : www.ninova.itu.edu.tr

Course Objectives:

- Basic architecture of a generic microprocessor.
- Memory design and addressing methods.
- Assembly programming concepts by using generic instructions set.
- Principles of serial and parallel interfacing.

Recommended Books :

1) Mikroişlemciler Mikrobilgisayarlar, (5.Baskı) , Eşref Adalı, Birsen Yayınevi, 2004.
2) Microcomputer Engineering, (3rd Edition) , Gene H. Miller, Pearson Publishing, 2003.

Grading Method :

- 1 Midterm exam : 35 %
- 2 Homeworks : 5 % + % 5
- Final exam : 55 %

Grading Requirements :

- Conditions to enter the final exam and not to get VF grade:
    1. Students must attend at least 70% of lectures.
    2. Weighted average of midterms and homeworks must be at least 25/100 points.
- Usually, overall average grade for passing the course is minimum 40/100.

Simulation Software (MikBil) for Educational CPU (Örnek MİB) : Available at Ninova course web page.

WEEKLY PLAN (TENTATIVE)

WEEK	DATE	LECTURE	TOPIC	HOMEWORK ANNOUNCEMENT
1	07.02.2017	01	Introduction, Number Systems	
2	14.02.2017	02	Computer Overview - Memory	
3	21.02.2017	03	Memory Design	
4	28.02.2017	04	CPU overview, Instruction format	
5	07.03.2017	05	Addressing methods	
6	14.03.2017	06	Instruction types	HW1
7	21.03.2017	06	Instruction types (continued)	
8	28.03.2017	-	İTÜ VACANCY (Dönem Ara Tatili)	
9	04.04.2017	-	MIDTERM EXAM	
10	11.04.2017	07	Parallel communication interface	
11	18.04.2017	08	Serial communication interface	
12	25.04.2017	09	Stack, Subroutines, Interrupts	HW2
13	02.05.2017	10	Development of Microprocessor Based Designs	
14	09.05.2017	11	Coding examples and applications	
15	16.05.2017	-	-	

IMPORTANT RULES

- You must do the homeworks/exams by yourself individually.
- Copying, collaboration, getting help is considered as cheating.
- A student should never give his homework/exam to other students.
- If cheating is found, those homework/exam grades will be zero.