Computer Engineering Department

ECE 22440: Microprocessors Lab
Spring 2011 Semester

Instructors   Dr. Gheith Abandah, Eng. Sumaya AbuZaytoon

Home page   http://www.abandah.com/gheith

No. of credit hrs 1

Co-requisites   ECE 22446

Room   Microprocessors Lab EE204

References   Barry B, The Intel Microprocessors: 8086/8088, 80186/80188, 80386, 80486, Pentium, Pentium Pro Processor, Pentium II, Pentium III, Pentium 4, and Core2 with 64-bit Extension: Architecture, Programming, and Interfacing, 8th ed., Prentice-Hall, 2008.

Grading

Quizzes and Pre-Lab Reports	10%+10%
In-Lab Performance and Post-Lab Reports	10%+30%
Final Practical Exam	10%
Final Theoretical Exam	30%

Tentative outline   Using MASM, the student designs and runs assembly programs to interface different chips like 8255 and 8254 with the PC.

Experiments

Week3	Exp1	Introduction to Microsoft Assembler (MASM)
Week4	Exp2	Program Control Instructions and Interrupts
Week5	Exp3	Interrupts
Week6	____	First Exam week >> No lab for this week
Week7	Exp4	Logic Analyzer and Parallel Port
Week8	Exp5	Programmable Peripheral Interface 8255
Week9	Exp6	Programmable Interval Timer 8254
Week10	Exp7	The 62256 SRAM Memory Chip
Week11	____	Quiz
Week12	____	Second Exam week >> No lab for this week
Week13	Exp8	More on 62256 SRAM Memory Chip and PPI Chip

Good Luck☺