

University of Mosul
Computer Engineering Department

Subject: Adv. Microprocessors
Class: MSc.
Teaching Language: English
Lecturer: Dr. Ahlam Fadhil Mahmood

Course 1		
No.	Article	Week
1.	Microprocessors Evolution: What is a microprocessor-Microprocessors Instructions-Microprocessors History-Microprocessors Architectures-Types of Microprocessors-Parallel Processors-Microprocessors Applications.	1
	Seminar: Groups	
2.	80386 Mode of Operations: Real, protected, virtual mode Protected Mode Registers	1
	Seminar 1: 13th Generation Intel Core1	
3.	Protected mode memory management and address translation	1
	Seminar 1-2: 13th Generation Intel Core2	
4.	Descriptor and Page Table Entries	1
	Seminar 2: Mobile Processor1	
5.	Protected-mode system control Instruction set	1
	Seminar 2-2: Mobile Processor2	
6.	Multitasking and Protection	1
	Seminar 3: Quantum Processor1	
7.	8087 Coprocessor Architecture	1
	Seminar 3-2: Quantum Processor2	
8.	8087 Instruction Set, MMX	1
	Seminar 4: Graphical Processor Unit1	
9.	Special purpose Processor, DSP	1
	Seminar 4-2: Graphical Processor Unit2	
10.	Network Processor	1
	Seminar 5: Network Processor1	
11.	ATMEG 2560 Architecture	1
	Seminar 5-2: Network Processor2	
12.	Programing ATMEG 2560	2
	Seminar 6: Raspberry Pi5	
13.	ATMEG 2560 Counters/Timers	
	Seminar 6-2: Raspberry Pi5-2	
14.	ATMEG 2560 Serial Communications, Interrupt	2
	Exam.:	

- 1- Book1: "The Intel Microprocessors". Barry B. Brey. Pearson-Prentice-Hall, 2009.
- 2- Book2: "The 80386, 80486 and Pentium processors Hardware, Software and Interfacing", WALTER Triebel, 1998.
- 3- DSP Data Sheet. TMS320C54x DSP
- 4- Network Processors 2004 The McGraw-Hill Companies.
- 5- The ATMEL2560 Data Sheet.
- 6- Papers related to seminar topics.