Course Schedule of 16.317 Microprocessor I (Spring 2006)

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1. Course Schedule

Tentative course schedule is given below. Please check frequently for updates.

Please be advised that (1) lecture topics do NOT necessarily follow the order of the schedule (2) the coverage of each topic may need more or less time than what is allocated. It is the responsibility of students to attend class and find out the exact coverage of the course materials in each class.

Make-up exams are scheduled ONLY if class is cancelled or school is closed due to adverse weather or other reasons.

Week	Date	Topic	Lecture Notes	Due of assignments
1	01/25	Microprocessors and Microcomputers	Chapter 1	
	01/27	80386DX internal architecture, data organization	Chapter 2: 1-3	
2	01/30	registers, memory segmentation	Chapter 2: 4-8	
	02/01	address generation, stack, I/O addr space	Chapter 2: 9-11	
	02/03	Assembly language program development	Chapter 3: 1-3	
3	02/06	Addressing mode I	Chapter 3: 4-5	
	02/08	Addressing mode II	Chapter 3: 6-7	
	02/10	Assembly language coding and debugging	Chapter 4	

4	02/13	Data transfer and arithmatic instructions	Chapter 5: 1-2	
	02/15	Logic and shift instructions	Chapter 5: 3-4	
	02/17	Rotate and bit instructions	Chapter 5: 5-6	
5	02/20	**President's Day (NO Class)**		
	02/21, Mon Schd.	Flag and compare instructions	Chapter 6: 1-2	
	02/22	Jump and subroutine instructions	Chapter 6: 3-4	
	02/24	Loop and string instructions	Chapter 6: 5-6	
6	02/27	**Pre-exam Review**		
	03/01	**Exam 1**	Chapter 1-6	
	03/03	Protected mode registers (GDTR, IDTR)	Chapter 8: Notes in pdf	
7	03/06	LDTR and TR	Chapter 8: 4-5	
	03/08	CR and SSR	Chapter 8: 6-7	
	03/10	Virtual address, segmentation of virtual space	Chapter 8: 8-9	
8	03/11	**Spring Break (03/11-03/19)**		

9	03/20	address translation in segmented MM	Chapter 8: 10-11	
	03/22	Page table and vir-to-phy addr translation	Chapter 8: 12-13	
	03/24	Page table and vir-to-phy addr translation	Chapter 8: 12-13	
10	03/27	Protection model, privilege and task switching	Chapter 8: 14-16	
	03/29	**Pre-exam Review**		
	03/31	**Exam 2**	Chapter 1-8	
11	04/03	Interfaces of 80386DX	Chapter 9: 1-4	
	04/05	Interfaces of 80386DX	Chapter 9: 1-4	
	04/07	System clock, bus cycle and memory organization	Chapter 9: 5-8	
12	04/10	Interface circuitry, PLA and I/O	Chapter 9: 9-11	
	04/12	Interface circuitry, PLA and I/O	Chapter 9: 9-11	
	04/14	I/O		
13	04/17	**Patriot's Day, NO CLASS**		
	04/19, Mon Schd.	ROM, static RAM	Chapter 10: 1-3	
	04/21	Dynamic RAM, FLASH, parity check	Chapter 10: 4-6	
14	04/24	Cache, 8235DX,	Chapter 10: 7-8	

		direct-mapped cache		
	04/26	Direct-mapped cache, two-way associative cache	Chapter 10: 8-9	
	04/28	**University Day, NO CLASS**		
15	05/01	8-byte-wide parallel I/O, time-delay loop and printer interface	Chapter 11: 1-5	
	05/03	8255A programmable peripheral interface	Chapter 11: 6	
	05/05	82C54 programmable interval timer	Chapter 11: 7	
16	05/08	82C37A programmable direct memory access (PDMA) controller	Chapter 11: 8	
	05/10	Interrupts, interrupt vector and interrupt instructions	Chapter 12: 1-3	
	05/11, Fri Schd.	**Course Review**		
17	05/13 -	**University Final Exam Schedule**		