

CMPS 5013 Tentative agenda:

Aug 27-	Introduction – binary numbers
Aug 28-	LAB 1 - CPU registers, DOS operating system
Aug 29-	Number systems - conversion
Sep 3-	Negative numbers
Sep 4-	LAB 2 - Binary numbers
Sep 5-	Fractions – hexadecimal system
Sep 10-	Introduction to computer architecture, cache, pipeline
Sep 11-	LAB 3 - Binary numbers - fractions
Sep 12-	Computer evolution
Sep 17-	Computer performance
Sep 18-	LAB 4 - Addressing memory, simple arithmetic
Sep 19-	Instruction set overview Textbook Assignment # 1 due
Sep 24-	Operands and instructions
Sep 25-	LAB 5 - Arithmetic operations, conditional jump, flags
Sep 26-	Logical operations and decisions Textbook Assignment # 2 due
Oct 1-	Procedures - Interrupts
Oct 2-	LAB 6 - Conditional jumps, loops
Oct 3-	Characters and addressing modes Textbook Assignment # 3 due
Oct 8-	Compilation and execution
Oct 9-	LAB 6a - review
Oct 10-	Test # 1
Oct 15-	Arrays and Pointers
Oct 16-	LAB 7 - Procedures
Oct 17-	Introduction to memory/storage
Oct 22-	Disk technology
Oct 23-	LAB 8 - Procedures and stacks
Oct 24-	Cache memory address mapping Textbook Assignment # 4 due - Project assignment – phase 2
Oct 29-	Write policies – associative mapping
Oct 30-	LAB 9 - Boolean operations
Oct 31-	Replacement algorithms
Nov 5-	Error correction introduction
Nov 6-	LAB 10 - Bit manipulation
Nov 7-	Error correction hamming code
Nov 12-	RAID
Nov 13-	LAB 11 - Arrays and strings
Nov 14-	Memory management Textbook Assignment # 5 due
Nov 19-	Paging
Nov 20-	LAB 12a - Programming practice
Nov 21-	Test # 2 Textbook Assignment # 6 due
Nov 26-	Segmentation
Nov 27-	Thanksgiving Break
Nov 28-	Thanksgiving Break
Dec 3-	ARM and I7 examples
Dec 4-	LAB 12a - Programming practice
Dec 5-	Introduction to parallel processors
Dec 12-	Finals (Thursday, 1:00 pm)