

Comp 411 Syllabus Fall Semester 2007

Textbook: Patterson & Hennessy, **Computer Organization & Design**,
3rd Edition, ISBN: 1-55860-604-1

Schedule:	PS in/out
1. (8/22) Course Introduction & Information Theory	
2. (8/27) Computer Technology and Abstraction	
3. (8/29) Computer Representations – Instructions and Data	X/1
4. (9/5) A Simple Instruction Set	1/2
5. (9/10) Operands and Addressing Modes	
6. (9/12) Assembly Language Programming	2/3
7. (9/17) Stacks and Procedures	
8. (9/19) Assemblers and Compilers	3/4
9. (9/24) Transistors and Logic Gates	
10. (9/26) Quiz #1	
11. (10/1) Arithmetic Circuits - Addition & Subtraction	
12. (10/3) Arithmetic Circuits – Multiplication	4/5
13. (10/8) Arithmetic Circuits – Floating Point	
14. (10/10) CPU State - Registers and Memories	5/6
15. (10/15) CPU Clocks - Sequential Logic	
16. (10/17) Programmable Machines	6/7
FALL BREAK	
17. (10/22) Building a Computer	
18. (10/24) CPU Performance	7/8
19. (10/29) Basic Pipelining	
20. (10/31) Quiz #2	
21. (11/5) Pipelining a CPU	
22. (11/7) Pipelining Hazards	8/9
23. (11/12) Memory Hierarchy	
24. (11/14) Caches	9/10
25. (11/19) Virtual Memory	
26. (11/26) Operating System Concepts	
27. (11/28) Interconnect and Communications	10/X
28. (12/3) Multiprocessors and Parallel Computers	
29. (12/5) CPU-Futures & Wrap Up	

(Monday 12/10) Final Exam 12:00pm -3:00pm

Grading:

Best 8 scores out of 10 Problem Sets	(5% each)	40%
2 in-class quizzes	(15% each)	30%
Final Exam		30%

Problem sets will be posted on Wednesdays and are due back on the next Wednesdays' class meeting (before the beginning of lecture). This means, you will have at least one and sometimes two weeks to complete each set. No problem set will be due the week of a quiz. Late problem sets will not be accepted, but the lowest two problem-set scores will be dropped.