Comp 411 Syllabus
Fall Semester 2007


Schedule:  

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 2/3  
6. (9/12) Assembly Language Programming  
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 4/5  
12. (10/3) Arithmetic Circuits – Multiplication  
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  
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 8/9  
22. (11/7) Pipelining Hazards  
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  

FALL BREAK

(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.