

# CS404/504 - Intermediate Computer Architecture

Course Syllabus Spring 2009

**Instructor:** Bob Rinker, JEB 226, (208)885-7378, rinker@cs.uidaho.edu

**Text:** *Computer Organization and Design: the Hardware/Software Interface*, Fourth Edition, by Patterson and Hennessy, 2009

Week	Day		Topic	Text/Ref
1	Jan	14 W	Introduction, orientation, history	Chap 1
		16 F	History, performance	Chap 1
2		19 M	*** Martin Luther King Day - No Classes ***	
		21 W	Performance	Chap 1
		23 F	Machine Language	Chap 2
3		26 M	Machine Language, Instructions	Chap 2
		28 W	Machine Language, Instructions	Chap 2
		30 F	Machine Language, Instructions	Chap 2
4	Feb	2 M	Number Systems	Chap 3
		4 W	Computer Arithmetic	Chap 3
		6 F	Computer Arithmetic	Chap 3
5		9 M	Review - Digital Logic	App B
		11 W	Basics of Logic Design	App B
		13 F	Intro to VHDL	
6		16 M	*** President's Day - No Classes ***	
		18 W	VHDL	
		20 F	**** Test 1 ****	
7		23 M	VHDL	
		25 W	The Processor	Chap 4
		27 F	The Processor	Chap 4
8	Mar	2 M	The Processor	Chap 4
		4 W	The Processor	Chap 4
		6 F	The Processor	Chap 4
9		9 M	Processor Implementation	App C,D
		11 W	Processor Implementation	App C,D
		13 F	Processor Implementation	App C,D
		16 - 20	****Spring Break - NO Classes****	
10		23 M	Processor Implementation	App C,D
		25 W	Processor Implementation	App C,D
		27 F	Memory	Chap 5
11	Apr	30 M	Memory	Chap 5
		1 W	Memory	Chap 5
		3 F	Memory	Chap 5
12		6 M	Memory	Chap 5
		8 W	Pipelining	Chap 4,App D
		10 F	**** Test 2 ****	
13		13 M	Pipelining	Chap 4,App D
		15 W	Pipelining	Chap 4,App D
		17 F	Pipelining	Chap 4,App D
14	Apr	20 M	Pipelining	Chap 4,App D
		22 W	Storage and I/O	Chap 6
		24 F	Storage and I/O	Chap 6
15	May	27 M	Storage and I/O	Chap 6
		29 W	Multicores, multiprocessors, clusters	Chap 7
		1 F	Multicores, multiprocessors, clusters	Chap 7
16		4 M	Multicores, multiprocessors, clusters	Chap 7
		6 W	Multicores, multiprocessors, clusters	Chap 7
		8 F	Final Exam Review	

**Final:** Thursday, May 14, 10:00am-Noon

**Grading:**

	CS404	CS504
Two Midterm Tests (15% ea)	30%	30%
Quizzes	15%	15%
Final Exam	20%	15%
Homework/Programming Projects	35%	25%
Grad Project		15%
Total	100%	100%

The letter grade you receive from the course will be determined as follows:

90%	-	100%	A
89.9%	-	80%	B
79.9%	-	70%	C
69.9%	-	60%	D
59.9%	-	0%	F

The instructor reserves the right to adjust these percentages lower if deemed necessary.