

CS150 - Computer Organization & Architecture

Course Syllabus

Fall 2009

Instructor: Bob Rinker, JEB 235, 885-7378, rinker@cs.uidaho.edu

Class website: www.cs.uidaho.edu/~rinker/cs150

Text: *Introduction to Computing Systems*, Second Edition, Patt and Patel, McGraw-Hill, 2004.

Wk	Day		Topic	Text/Ref	
1	Aug	24	M	Introduction	Chap 1
		26	W	Bits, Data Types, Integers	Chap 2
		28	F	Base Conversion	Chap 2
2	Sep	31	M	2's Complement	Chap 2
		2	W	Binary Arithmetic	Chap 2
		4	F	Binary Arithmetic	Chap 2
3		7	M	*** Labor Day - No Classes ***	
		9	W	Logic gates - AND, OR, NOT	Chap 3
		11	F	Combinational Logic Circuits	Chap 3
4		14	M	Combinational Logic Circuits	Chap 3
		16	W	Storage Elements - Flip Flops	Chap 3
		18	F	Sequential Logic Circuits	Chap 3
5		21	M	Sequential Logic Circuits	Chap 3
		23	W	Finite State Machines	Chap 3
		25	F	LC-3 Data Path	Chap 3
6		28	M	LC-3 Processor Overview	Chap 4
		30	W	Instruction Processing	Chap 4
	Oct	2	F	**** Test 1 ****	
7		5	M	Opcodes, addressing modes	Chap 5
		7	W	LC-3 Instruction Set Architecture	Chap 5
		9	F	LC-3 Instructions - Operate	Chap 5
8		12	M	LC-3 Instructions - Data Movement	Chap 5
		14	W	Addressing main memory	Chap 5
		16	F	LC-3 Instructions - Control	Chap 5
9		19	M	Assembly Language	Chap 7
		21	W	Assembly Instructions, pseudo-ops	Chap 7
		23	F	Assembler operation	Chap 7
10		26	M	Assembler operation	Chap 7
		28	W	Object Files, separate compilation	Chap 7
		30	F	Primitive I/O - device registers	Chap 7
11	Nov	2	M	Keyboard input	Chap 7
		4	W	Output to the screen	Chap 8
		6	F	**** Test 2 ****	
12		9	M	TRAP instruction	Chap 9
		11	W	TRAP routines	Chap 9
		13	F	Subroutines	Chap 9
13		16	M	Subroutines	Chap 9
		18	W	The Stack	Chap 10
		20	F	Stack Operations	Chap 10
	Nov	23 - 27		****Fall Recess - NO Classes****	
14	Dec	30	M	The Stack	Chap 10
		2	W	Assembly Language and C	Chap 11
		4	F	C Control structures	Chap 13
15		7	M	C Functions	Chap 14
		9	W	Pointers	Chap 16
		11	F	Final Exam Review	

Final: Thursday, December 17, 12:30-2:30PM

Grading:

Two Hour Tests (15% ea)	30%
Quizzes	15%
Final Exam	20%
Homework/Projects	30%
Award for completing all projects	5%
Total	<u>100%</u>

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

100%	-	90%	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.

Disability Support Services Reasonable Accommodations Statement:

Reasonable accommodations are available for students who have documented temporary or permanent disabilities. All accommodations must be approved through *Disability Support Services* located in the Idaho Commons Building, Room 306 in order to notify your instructor(s) as soon as possible regarding accommodation(s) needed for the course.

- phone: 885-6307
- email: dss@uidaho.edu
- website: www.access.uidaho.edu